Towards an understanding of the HRM bundle for lean service in the UK

This item was submitted to Loughborough University’s Institutional Repository by the/an author.

Additional Information:

• A Doctoral Thesis. Submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of Loughborough University.

Metadata Record: https://dspace.lboro.ac.uk/2134/37075

Publisher: © Araz Zirar

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
Towards an understanding of the HRM bundle for lean service in the UK

by

Araz Zirar

A Doctoral Thesis

submitted in partial fulfilment of the requirements for the award of

Doctor of Philosophy

of

Loughborough University

September 2018

© by Araz Zirar 2018
Abstract

Applying the principles of lean enables service organisations to improve service delivery processes and provide customers with better value. A growing body of evidence suggests that without a proper utilisation of enabling human resource management (HRM) practices, service organisations fail to orient their employees to conduct lean projects and support its practices. Enabling HRM practices provide supportive activities that assist organisations to direct their workforce to support lean practices. How service organisations utilise enabling HRM practices for that purpose has, as yet, not received significant attention in the existing literature.

This study sets out to explore enabling HRM practices to support lean service. It is a scholarly attempt to thoroughly understand how service organisations utilise these practices to support their lean programmes. In doing so, it attempts to answer how relevant enabling HRM practices are to lean service and ‘what’ those practices are. It also answers ‘how’ and ‘why’ these practices are utilised to support lean service.

The research is based on five case studies directed towards answering an exploratory research question. Such a question grants the choice of a case study as an appropriate research strategy to collect contextual qualitative data through naturalistic data collection techniques. Purposive sampling is utilised to select the case studies and cross comparison is conducted for in-depth analysis. The case study organisations were adjudged to be at four lean maturity stages according to S-curve theory (Netland and Ferdows, 2016): ‘Beginner’, ‘In-transition’, ‘Advanced’ and ‘Cutting-edge’, thus providing a richness of data reflecting variety of similar and different service activities and lean maturity stages.

A total of thirty-one semi-structured interviews including four to eight interviews from each organisation were conducted. The interviews were supplemented with observation during site visits and multiple sources of secondary data. The data was coded by means of the NVIVO 10 software package. Rigorous thematic analysis was conducted with reference to Braun and Clark’s (2006) six-stage approach of theme generation and 15-point checklist for ‘good’ thematic analysis.
As a main contribution, the analysis identifies 18 enabling HRM practices to support lean service: recruitment and selection, role profiling, capacity planning, absence management, retention and release, succession planning, training, career development, performance management, reward and recognition, groups and teamwork, employee voice, employee communication and collaboration, labour relations, employee motivation, employee involvement, employee empowerment and employee health and safety. The novelty of the research lies in providing a comprehensive list of practices which is rooted in contextual data and reflects the ‘real-world’ context.

The identified 18 enabling HRM practices lead to the development of a novel HRM bundle that covers seven areas of activities of people management to support lean service: (i) employee resourcing, (ii) training and development, (iii) performance management, (iv) reward and recognition, (v) employee relations, (vi) employee behaviour and (vii) employee health and safety. Furthermore, the lean-specific HRM bundle is used to develop a PDCA (plan-do-check-act), based on the Deming Cycle (Deming, 2000), showing lean service planning, provision and monitoring. Moreover, the bundle theory, contingency and configuration theories are used to explain bundling HRM practices and justify the findings. Borrowing ‘bundle theory’ (Casullo, 1988) to justify bundling HRM practices serves as another novelty of this research.

It is evidently clear from the findings that this study provides an empirical and grounded understanding of enabling HRM practices to support lean service. The theoretical contribution of the thesis is therefore elaborating, refining and extending the existing understanding of enabling HRM practices to support lean service. In addition, the practical contribution is increasing the awareness of service organisations of the 18 enabling HRM practices, a lean-specific HRM bundle of seven areas of activities of people management and a continuous improvement model that they can utilise to orient their employees to support lean programmes.

**Keywords:** Lean service, lean practices, enabling HRM practices, HRM practices, HRM bundle, lean-specific HRM bundle, PDCA framework, multi-case study, service sector, United Kingdom
Style

The style of referencing used in this thesis is Harvard Referencing Style in accordance with the *Cite Them Right: The Essential Referencing Guide (Palgrave Study Skills) (10th Edition)*. Further, to ensure clarity, the quotes from the interview data in the thesis are indicated by using Times New Roman, 10-point, indent of 1 cm left and 1 cm right. The quotations are reproduced verbatim and any grammatical or syntax errors not been removed or changed and [sic] have not been used. Moreover, to comply with the ethical requirements of the University, the name of the interviewees and their organisations are completely anonymised by using pseudonyms.
Dedications

To the memories of my father, uncle, grandfather and grandmother who all wished to witness this achievement in their lifetime.
Acknowledgements

I seize this opportunity to thank my supervisors, family members, friends, colleagues, employer and the case study organisations. Thank you very much for the support.

Primarily, I would like to express appreciation to my supervisors: Dr Alok Choudhary and Dr Clive Trusson, whom have provided me with support and guidance throughout my PhD journey. Furthermore, they have provided me with constructive criticism and thought-provoking discussions that has enabled me to refine this thesis.

I am also thankful to Professor Zoe Radnor and Professor Andrew Charlwood for their supervision during the early stages of my PhD. Moreover, I would love to thank Miss Tracey Preston and Mrs. Aly-Howells Chivers for all their support.

I would additionally like to thank my wife and son; father, mother, brother and sister in laws; and uncle. My wife, Awezan, who has always been there for me and supported me in the most difficult times of my PhD journey. My son, Aran, has always been a source of joy. I recall the several walks we had to his school together and his favourite quote would be: “Daddy, let’s walk and talk”. I do not think I could have done this at all without your unceasing support, let alone have done it well. Thank you for always believing in me, and for your love and affection. I would like to show gratitude to Hajia, Mamosta Saeed, Dr Kishwar and Dr Mazyar and Hiwa Braxi for your invaluable support. This research would not have been the same without you.

There are many friends and colleagues I also want to thank: Dr Abdulbaqi, Khalid, Bader, Saheed, Majed, Higor, Taqi, Angela, Xatu Naz, Mustapha, Big Rob, Ursula, Zoe, Mabelle, Rui, Dale, Iqbal, Vani, Arijit, Sibi, Russ, Karen, Kayode, Leyla, Xiang Li, Karim, Fahham, Bishal, Veepan and Sonali among others. You all have been amazing colleagues and our friendship has been and continues to be invaluable.

I also owe an enormous debt to Dr Ahlam Ibrahem and Dr Khaild Mirkhan for your belief in me. I also took inspiration from Dr Khalid Saleh, the former Vice Chancellor of the University of Kurdistan – Helwer, who was an excellent mentor and role model. I would
likewise like to thank my employer, the KRG Ministry of Higher Education and Scientific Research, for their support.

Finally, I owe a debt of gratitude to the case study organisations: MyFinance, FineBank, Hinance, EastManage and HighEnd. They granted me access to their organisations and provided me with my thesis relevant information. Although their real names are anonymised, I do thank them very much.
Table of contents

Abstract ............................................................................................................................................... II
Style ................................................................................................................................................ IV
Dedications .......................................................................................................................................... V
Acknowledgements ........................................................................................................................ VI
Table of contents .......................................................................................................................... VIII
List of figures ........................................................................................................................................ XI
List of tables ........................................................................................................................................ XIII
Acronyms and abbreviations ........................................................................................................... XIV

Chapter 1: Introduction ....................................................................................................................... 1
1.1 Research scope ................................................................................................................................. 2
1.2 Research background ......................................................................................................................... 3
1.3 Research motivation ......................................................................................................................... 4
1.4 Research aim, question and objectives ............................................................................................ 6
1.5 Research methodology ..................................................................................................................... 7
1.6 Novelty, contribution and significance of research .......................................................................... 9
1.7 Outline of the study ........................................................................................................................ 10

Chapter 2: Literature review ................................................................................................................ 13
2.1 Introduction ...................................................................................................................................... 14
2.2 Lean service ..................................................................................................................................... 15
  2.2.1 Genealogy of lean ......................................................................................................................... 15
  2.2.2 Defining the concept of ‘lean’ ....................................................................................................... 17
  2.2.3 Lean in the service sector ............................................................................................................. 18
    2.2.3.1 Defining the concepts of ‘service’ and ‘service sector’ ......................................................... 18
    2.2.3.2 Service vs manufacturing: the differences ............................................................................. 19
    2.2.3.3 Application of lean in the service sector .............................................................................. 22
    2.2.3.4 Lean objectives and types of waste ..................................................................................... 25
    2.2.3.5 A critical perspective on lean management ....................................................................... 28
    2.2.3.6 Lean abstraction levels ........................................................................................................ 33
    2.2.3.7 The four bundles of lean ..................................................................................................... 34
2.3 HRM practices and lean service ..................................................................................................... 37
  2.3.1 Defining ‘HR’ and ‘HRM’ ........................................................................................................... 37
  2.3.2 HRM bundle: bundling and rationale for it ................................................................................. 38
  2.3.3 Managing and directing the human element of lean ................................................................. 42
  2.3.4 Enabling HRM practices ........................................................................................................... 46
  2.3.5 Mediating role of HRM practices .............................................................................................. 64
2.4 Research focus ............................................................................................................................... 70
  2.4.1 Research gaps and research question ....................................................................................... 70
  2.4.2 Reflections on literature review .............................................................................................. 72
  2.4.3 Underpinning theories to answer research questions ............................................................. 74
2.5 Summary of chapter ....................................................................................................................... 79

Chapter 3: Research design ................................................................................................................ 80
3.1 Introduction ..................................................................................................................................... 81
List of figures

Figure 1: Research scope, ‘Enabling HRM practices to support lean service’ .................................................. 2
Figure 2: The research question ...................................................................................................................... 7
Figure 3: Research phases adopted in this study .......................................................................................... 8
Figure 4: Structure of thesis .......................................................................................................................... 11
Figure 5: Twenty-two manufacturing practices that form lean bundles (Shah and Ward, 2003) .................. 35
Figure 6: The research ‘onion’ (Saunders, Lewis and Thornhill, 2015, p. 124) ............................................ 81
Figure 7: Steps to select the case study organisations ................................................................................... 95
Figure 8: Data collection timeline ................................................................................................................. 98
Figure 9: Mapping the case studies against the S-Curve theory adopted from Netland and Ferdows (2016)... 105
Figure 10: Service improvement in EastManage using a 5s lean tool ......................................................... 121
Figure 11: Lean maturity stage at FineBank .................................................................................................. 122
Figure 12: Succession planning in HighEnd .................................................................................................... 123
Figure 13: ‘Ia’ lean course ............................................................................................................................... 123
Figure 14: ‘Ib’ lean course ............................................................................................................................... 124
Figure 15: ‘Ic’ lean course ............................................................................................................................... 124
Figure 16: Use of ‘Thank you’ letter .............................................................................................................. 125
Figure 17: A step-by-step guide to role profiling ......................................................................................... 126
Figure 18: Bug boards .................................................................................................................................... 127
Figure 19: Employing PDCA in Hinance ....................................................................................................... 128
Figure 20: Six stages of thematic analysis proposed by Braun and Clark (2006) ........................................ 131
Figure 21: Four stages of data analysis using NVivo (Bazeley and Jackson, 2013) ..................................... 133
Figure 22: Sources (and documentary evidence) screen snip ..................................................................... 133
Figure 23: ‘Internals’ (interview transcripts) screen snip ........................................................................... 134
Figure 24: Sample of ‘Externals’ (website link of case studies) .................................................................. 134
Figure 25: ‘Memos’ screen snip .................................................................................................................... 135
Figure 26: Sample of ‘Memos’ ..................................................................................................................... 135
Figure 27: Sample of ‘Framework Matrices’ ............................................................................................... 136
Figure 28: Screen snip of employee involvment framework matrix ............................................................. 136
Figure 29: Classifications screen snip .......................................................................................................... 137
Figure 30: Sample of the formulation of nodes to create potential themes .................................................. 138
Figure 31: Sample of coding in NVivo ......................................................................................................... 138
Figure 32: Node Matrices screen snip ........................................................................................................... 139
Figure 33: Queries screen snip ..................................................................................................................... 139
Figure 34: Reports screen snip ..................................................................................................................... 140
Figure 35: Node summary report screen snip ............................................................................................... 140
Figure 36: Screen snip of interview transcript with Andy, Head of Asset Management, at EastManage .... 143
Figure 37: Producing the initial thoughts of recruitment and selection ....................................................... 144
Figure 38: 400 pages of interview textual data ............................................................................................ 145
Figure 39: Coding the interview transcripts ................................................................................................. 145
Figure 40: Coding excerpts of transcripts .................................................................................................. 146
Figure 41: Coding each individual interview ............................................................................................... 146
Figure 42: Searching for themes .................................................................................................................... 147
Figure 43: Collecting coded extracts and searching for themes ................................................................. 148
Figure 44: Creating matrices for all coded extracts, codes and themes ..................................................... 149
Figure 45: Revising themes for depth and breadth ....................................................................................... 150
Figure 46: Screen snip of refining and defining themes .............................................................................. 150
Figure 47: Generating the overarching themes and sub-themes ............................................................... 151
Figure 48: Screen snip of reporting and supporting themes with data ....................................................... 152
Figure 49: Enabling HRM practices that support lean service ................................................................. 162
Figure 50: Recruitment and selection screen snip from NVivo project .................................................... 164
Figure 51: Role profiling screen snip from NVivo project ........................................................................... 169
Figure 52: Capacity planning screen snip from NVivo project ................................................................. 174
Figure 53: Absence management screen snip from NVivo project ............................................................. 177
Figure 54: Retention and release screen snip from NVivo project ............................................................ 180
Figure 55: Succession planning screen snip from NVivo project .............................................................. 184
Figure 56: Training screen snip from NVivo project .................................................................................... 186

XI
List of tables

| Table 1: Reported benefits of lean service | 23 |
| Table 2: Objectives of lean service | 26 |
| Table 3: Types of waste | 27 |
| Table 4: Philosophical assumptions adopted in this research | 84 |
| Table 5: Summary of the philosophical assumptions for conducting this study | 86 |
| Table 6: Case study organisations and participants’ position of responsibility | 93 |
| Table 7: Evidence/justification for positioning the case studies on S-Curve lean maturity stages | 102 |
| Table 8: Guiding interview questions, their purpose and supporting references | 108 |
| Table 9: The guiding questions and the four parts of an interview | 113 |
| Table 10: A 15-point checklist for ‘good’ thematic analysis (adopted from Braun and Clarke, 2006, p. 96) | 152 |
| Table 11: Reliability and validity in case study research (Source: Yin, 2009, p. 34) | 157 |
| Table 12: Utilising HRM practices to support lean service in the case study organisations | 163 |
| Table 13: The main lean-related training courses across the case study organisations | 190 |
| Table 14: Common communication channels to disseminate information about lean service | 211 |
| Table 15: How service organisations use lean relevant HRM practices | 274 |
| Table 16: Practical recommendations for HR-enabled lean in service organisations | 280 |
**Acronyms and abbreviations**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI Lead</td>
<td>Continuous Improvement Lead</td>
</tr>
<tr>
<td>CI</td>
<td>Continuous Improvement</td>
</tr>
<tr>
<td>CS</td>
<td>Case Study</td>
</tr>
<tr>
<td>DOM</td>
<td>Depot Operations Manager</td>
</tr>
<tr>
<td>EOM</td>
<td>Employee of Month</td>
</tr>
<tr>
<td>ER</td>
<td>Employee Resourcing</td>
</tr>
<tr>
<td>FTE</td>
<td>Full-time Equivalence</td>
</tr>
<tr>
<td>GPC</td>
<td>Government Purchase Card</td>
</tr>
<tr>
<td>HPWP</td>
<td>High Performance Work Practices</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resource(s)</td>
</tr>
<tr>
<td>HRM</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>JIT</td>
<td>Just in Time</td>
</tr>
<tr>
<td>KPIs</td>
<td>Key Performance Indicator(s)</td>
</tr>
<tr>
<td>LCS</td>
<td>Lean Competency System</td>
</tr>
<tr>
<td>OD</td>
<td>Organisational Development</td>
</tr>
<tr>
<td>PCs</td>
<td>Problem and Counter-measures</td>
</tr>
<tr>
<td>PDCA</td>
<td>Plan-Do-Check-Act</td>
</tr>
<tr>
<td>POT</td>
<td>Public Ordinary Telephone</td>
</tr>
<tr>
<td>REIs</td>
<td>Rapid Improvement Events</td>
</tr>
<tr>
<td>SAT</td>
<td>Senior Advisor Team</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard Industry Classification</td>
</tr>
<tr>
<td>TIM WOODS</td>
<td>Transport, Inventory, Motion, Waiting, Over-production, Over-processing, Defects, and Skills</td>
</tr>
<tr>
<td>TPM</td>
<td>Total Preventive Maintenance</td>
</tr>
<tr>
<td>TPS</td>
<td>Toyota Production System</td>
</tr>
<tr>
<td>TQM</td>
<td>Total Quality Management</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

This chapter presents an overview of the study. First, it provides a synopsis of the scope of the research. Then, it discusses the initial motivation of the researcher to conduct the proposed research. After that, it discusses the guiding research question along with the research aims and objectives. Next, it provides a synopsis of research methodology. After that, it describes the significance of this research to the body of knowledge and practitioners. Last, it outlines the structure of the thesis.

Chapter outline

1.1 Research scope .................................................................................................................. 2
1.2 Research background ......................................................................................................... 3
1.3 Research motivation ........................................................................................................... 4
1.4 Research aim, question and objectives ............................................................................... 6
1.5 Research methodology ..................................................................................................... 7
1.6 Novelty, contribution and significance of research .......................................................... 9
1.7 Outline of the study ......................................................................................................... 10
1.1 Research scope

Lean and HRM practices can maintain a bi-directional relationship (see Figure 1). Service organisations either utilise lean tools and techniques to improve HRM practices or use HRM practices to support their lean programmes (de Koeijer, Paauwe and Huijsman, 2014; Thirkell and Ashman, 2014). While understanding the utilisation of lean tools and techniques to improve HRM practices is significant, the focus of this research is how service organisations utilise HRM practices to support lean service.

Therefore, this thesis, mainly, explores ‘Enabling HRM practices to support lean service’. That’s to say, how they use practices such as recruitment, training, performance management and pay to provide their employees with the means, knowledge and opportunity to work on lean projects in their areas of responsibility or across their organisation, and to encourage and empower them to behave in a manner that supports lean service. The following highlights the rationale of the researcher to only research this area:

1) Several scholars have researched ‘Utilising lean tools and techniques to support HRM practices’ (e.g., Procter and Radnor, 2014; Thirkell and Ashman, 2014; Rees and Gauld, 2017). Therefore, this area has already been tapped.
2) Existing understanding around ‘how’ and ‘why’ enabling HRM practices are utilised to support lean service is significantly limited (see Chapter 2: Literature review). The extant literature is not only limited but also mainly focused on the manufacturing sector. Thus, it has a limited interpretation in the service sector.

3) The service sector is often labour intensive. Understanding enabling HRM practices to support lean is therefore vital. An in-depth understanding not only elaborates, extends and refines previous scholarly works but also helps service organisations to utilise HRM practices to support their lean programmes.

4) Taking into consideration the time and resources available for the researcher to conduct this research, it is necessary to limit the scope of the thesis to exploring HR-enabled lean service where theoretical and practical contributions can be identified.

Taken together, in the service sector, our understanding of HR-enabled lean service is noticeably limited to the studies in manufacturing. In most cases, these studies have attempted to demonstrate statistically significant links between HRM practices and lean. While these links are important to craft causal relationships between HRM practices and lean, they do not provide in-depth and contextual details to make sense of the relationships. Therefore, the role of enabling HRM practices to support lean service is yet to be explored in-depth and in real-world context. We need to understand ‘what’ the enabling HRM practices are and ‘how’ and ‘why’ service organisations utilise them to support lean programmes, which the proposed research is aiming to answer.

1.2 Research background

The context of this research is focussed on the service sector due to its increased importance in the UK economy. Lean is gaining momentum in the service sector (Suárez-Barraza, Smith and Dahlgaard-Park, 2012). Service organisations apply lean tools and techniques from manufacturing to their service delivery processes aiming, among other objectives, to improve their service delivery processes, create value for their customers and reduce waste (Bowen and Youngdahl, 1998).

On the other hand, the service sector has also experienced significant growth over the last couple of decades (Piercy and Rich, 2009). In the United Kingdom (UK), of the 32 million employed people, 84% are employed in the service sector (Office for National Statistics,
This percentage of employment has gradually increased since June 1978 i.e. an increase of 20% from 63% to 84% between June 1978 and March 2017 (Office for National Statistics, 2017).

As the service sector is often not concerned with making a ‘tangible product’ (Johnston and Clark, 2005), lean tools and techniques require adaptation to fit the service context and so does our present understanding of HR-enabled lean in the sector (Bowen and Youngdahl, 1998). Furthermore, lean service is mainly people-centric and, thus, not a mere application of tools and techniques (Sparrow, Hird and Cooper, 2014). It therefore necessitates the active involvement of the workforce of an organisation in lean practices (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). For that reason, in spite of the often-labour-intensive nature of service organisations (Chase, 1981), the existing literature provides only a limited understanding of how enabling HRM practices direct and manage the human element of lean service which plays a crucial role in employing lean practices in service organisations.

1.3 Research motivation

Motivation to conduct this research initially came from the researcher’s first-hand experience of lean service. The researcher was working in a management capacity at FutureTune, where the new management of the organisation decided to employ lean tools to improve service delivery processes. In this section, it is clarified that it was researcher’s experience of working at FutureTune that originally had driven this research.

FutureTune was considered as one of the exemplar providers of education services among its rivals. In 2011, the researcher commenced working in the organisation in a management capacity. Two years into his experience, the top management changed. The new management was interested in streamlining service delivery processes and reducing waste. And so, they brought in lean consultants to help with training employees on lean practices.

At the start, the implementation of lean service was in the form of various Kaizen events (Wiljeana et al., 2013). Gradually, the scale of lean service became wider and FutureTune took a holistic approach to integrate lean practices to all aspects of the organisation.
There was resistance from employees to accept lean service and support its approach of service delivery at the beginning. However, the new management utilised several HRM practices to improve their buy-in to lean. The researcher used to work closely with the management and the employees, and therefore witnessed first-hand the utilisation of HRM practices to support lean practices.

For that purpose, the new management enrolled key employees in lean-related training sessions. They included lean-related Key Performance Indicators (KPIs) in employees’ performance management. They reviewed role profiles and created new roles to support lean. They empowered team leaders to plan the capacity of their teams. They encouraged teamwork and created groups to collaborate on large-scale lean projects. These were some of the practices were utilised to support lean service.

However, when the researcher turned to the existing literature to make sense of the changes and understand how HRM practices could be utilised to support lean, he found limited research around this area. Despite the fact that previous scholarly works acknowledge the indispensable role of the workforce in lean service (e.g., de Koeijer, Paauwe and Huijsman, 2014), there was a significant ambiguity around enabling HRM practices that service organisations could utilise to enable their workforce to support it.

Scholarly works, generally, suggested different lists of lean-relevant HRM practices. They only: (i) identified multi-level statistical associations between the practices and lean and (ii) helped our understanding of associations in a manufacturing context. Much vagueness existed about the use of specific HRM practices and their relevance to lean service. They also did not offer a contextual and real-world understanding of the suggested practices. Consequently, there was a lack of consensus about the type of activities that service organisations could conduct to orient the human element of lean service.

For these reasons, an initial analysis of the literature revealed to the researcher that further research was needed to explore the nature and characteristics of the relationship between HRM practices and lean service. This initial quest encouraged him to research this area hoping to contribute to the literature and enrich current understanding around the utilisation of HRM practices to support lean.
1.4 Research aim, question and objectives

The aim of this thesis is to explore the relevance of HRM practices to lean service. In doing so, it attempts to address the research gap by elaborating, refining and extending the existing understanding around enabling HRM practices to support lean service. Figure 2 illustrates that the areas of literature reviewed for this research inquiry are mainly lean service, mediating role of HRM practices, managing and directing the human element of lean and enabling HRM practices and HRM bundle. These areas allow the researcher to understand ‘what we know’ with regard of enabling HRM practices to support lean service. These main areas, then, lead to a clear articulation of the research question.

Hence, as Figure 2 presents, the guiding research question is: “How, in practice, do service organisations engage with HRM practices to support lean service?” This question is divided into four sub-questions:

- How do service organisations view the relevance of HRM practices to lean service?
- What HRM practices do service organisations utilise to orient their employees to support lean practices?
- How do service organisations use enabling HRM practices to support lean service?
- Why do service organisations use enabling HRM practices to support their lean programmes?

To satisfy the sub-questions, the specific objectives of this study are hereunder. Figure 2 illustrates where these objectives are mainly addressed in this research:

i. to critically evaluate the existing literature on lean-relevant HRM practices and lean service,
ii. to investigate and identify enabling HRM practices that support lean service in the ‘real-world’ context of HR-enabled lean service,
iii. to analyse ‘how’ and ‘why’ such practices are used to support lean service,
iv. to propose a lean-specific HRM bundle that answers the question of ‘why’ enabling HRM practices are utilised to support lean service,
v. to integrate the HRM bundle in a continuous improvement framework to support lean service planning, provision and monitoring.
These research objectives lead to several novelties and contribution. Figure 3 shows the main contribution areas from this research which they are further discussed in 1.6 Novelty, contribution and significance of research.

**1.5 Research methodology**

The research methodology itinerary adopted in this thesis is outlined in Figure 3. The figure highlights that in the first phase the researcher attempted to understand the details and multi-
aspects of the phenomenon of the research inquiry by covering the relevant literature areas. This led to highlighting research gaps and an appropriate research strategy (multiple case study) to address those research gaps.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding the context, literature review and learning</td>
</tr>
<tr>
<td>2</td>
<td>Refining research design and interview questions</td>
</tr>
<tr>
<td>3</td>
<td>Contacting service organisations</td>
</tr>
<tr>
<td>4</td>
<td>Transcribing interviews, collating other data sources, analysing data using thematic analysis, presenting findings and contribution</td>
</tr>
</tbody>
</table>

**Figure 3: Research phases adopted in this study**

In phase two, the researcher refined the research design by finalising the details of the research design, obtaining ethics approval and finalising ‘research summary’ and ‘cover letter’, which were used to negotiate access with potential service organisations. In phase three, the purposefully selected organisations were contacted, the required interviews were conducted, and other sources of data were collated. In phase four, the data was thematically
analysed, enabling HRM practices were identified, a specific HRM bundle of seven areas of activities of people management was proposed, and then the bundle was mapped against a continuous improvement framework. The Bundle theory along with other theories was also used as a lens to explain the findings.

1.6 Novelty, contribution and significance of research

This research advances our knowledge and understanding of enabling HRM practices to support lean service. It explores the HRM practices that support organisations with their lean programmes. The following highlights the novelties and contribution of the proposed research:

i. Identifying 18 enabling HRM practices: In Chapter 4, this research identifies 18 enabling HRM practices from the contextual data collected for this research inquiry. These findings extend the literature as the existing understanding around enabling HRM practices to support lean service is inconsistent and lacks contextual and real-world understanding, as discussed in Chapter 2.

ii. A novel lean-specific HRM bundle is proposed in section 5.4.2 to explain ‘why’ 18 enabling HRM practices are used by the case study organisations. This HRM bundle based on ‘why’ adds to the existing literature as discussed in Section 2.3.2 that the existing literature around bundling HRM practices is limited.

iii. Developing a novel PDCA framework: In Section 5.4.5, the proposed lean-specific HRM bundle is mapped against the PDCA framework, showing lean service planning, provision and monitoring. This adds to the existing literature as this framework has not been proposed in which a lean-specific HRM bundle is mapped against a popular TQM tool of Deming Cycle (Tague, 2005), which could be used as a practitioner’s tool.

iv. Using Bundle theory: Due to the inductive nature of this research, theoretical relationships are not established or tested (Eisenhardt, Graebner and Sonenshein, 2016). However, in Section 2.4.3, three theories are used as lenses to answer the research questions: (i) Contingency theory, (ii) Bundle theory and (iii) Configuration theory. The novelty lies in using the fourth version of the Bundle theory (Casullo, 1988) to explain the bundling of HRM practices in this research.

v. Drawing on S-curve lean maturity stages (Netland and Ferdows, 2016): This research inquiry draws on S-Curve to indicate the lean maturity stages of the case study organisations employed for this study (see 3.7.5 The S-Curve of lean maturity stages).
By doing so, empirical data are collected from organisations that represent all the levels of the S-Curve. This Curve “can reduce the risk of making inaccurate inferences while interpreting empirical data from lean implementation.” (Netland and Ferdows, 2016, p. 1117) The novelty lies in using the Curve to get further insights into the lean journey of the case study organisations.

Overall, the significance of the study is three-fold. First, it contributes to the existing theoretical understanding around utilising enabling HRM practices to support lean service. Previous studies (e.g., Shah and Ward, 2003; Dal Pont, Furlan and Vinelli, 2008) crafted statistically significant links between HRM practices and lean. While such links are significant to understand the relationship, they are limited to explain HR-enabled lean service. So, this study adds to the current understanding by providing a detailed, contextual and real-world account of enabling HRM practices that are utilised by service organisations to support lean practices.

Second, for practice, this research inspires service organisations and lean-informed service managers to carefully utilise enabling HRM practices to support their lean programmes. Consequently, it provides practitioners and line managers in service organisations with a PDCA framework which is equipped with a lean-specific HRM bundle and original insights on how to make the most of HRM practices to support lean.

Third, in terms of scholarship, this research highlights several further research opportunities. It suggests that an extension of the findings to other types of service activity would provide a greater understanding of enabling HRM practices to support lean.

1.7 Outline of the study
My thesis is composed of six themed chapters (see Figure 4). In this chapter, the phenomenon of the study—utilising enabling HRM practices to support lean service—was introduced. It began by defining the scope of the research. It then went on to discuss the original motivation to want to research this area. This was followed by the research aim and objectives of the study. After that, the significance of the study was highlighted.
Figure 4: Structure of thesis

Research background and scope (Chapter 1)

- Research scope (1.1)
- Research background (1.2)
- Research rationale (1.3)
- Aims & objectives (1.4)
- Research significance (1.6)

Literature review and learning (Chapter 2)

- Lean service (2.2): genealogy, definition, service vs manufacturing, abstraction levels and lean bundles
- HRM practices (2.3): definition, HRM bundle, human element of lean service, enabling HRM practices
- Identification of research focus (2.4)

Research design (Chapter 3)

- Philosophy & approach (3.2-3.3)
- Methodological choice (3.4)
- Research strategy (3.5)
- Data collection (3.6)
- Data analysis (3.7)

Findings, discussion and conclusion (Chapter 4, 5 and 6)

- Identification of 18 HRM practices (4.4), specific HRM bundle (5.4.2), developing PDCA framework (5.4.5), placing findings in literature (Chapter 5), contribution to theory and practices (6.2) and future research (6.3)
The remaining part of this thesis proceeds as follows. Chapter two presents a critical analysis of the relevant academic literature and, thus, sets the research question in the context of the relevant literature. The third chapter is concerned with the methodology employed for this study: research design, methods of data collection and data analysis. Chapter 4 analyses the gathered data and discusses each of the overarching themes in turn. The fifth chapter places the findings in the body of literature, focusing on three key elements: (i) the human element of lean service, (ii) enabling HRM practices and (iii) a lean-specific HRM bundle. It also proposes a PDCA framework with the lean-specific HRM bundle integrated to support lean service. The final chapter discusses the theoretical and practical contributions of the findings to the existing literature. After that, it concludes the thesis by discussing the limitations of the study and recommendations for future research.
Chapter 2: Literature review

This chapter critically reviews the existing relevant literature on HR-enabled lean service. In doing so, the chapter has two sections. Section one discusses lean service. It begins with the genealogy of lean and, then, defines the concept of lean. After that, it discusses lean application in the service sector. This sub-section covers topics such as (i) what is meant by ‘service’ and the ‘service sector’, (ii) how is lean applied in the service sector, (iii) what are lean objectives and types of waste, (iv) what are lean abstraction levels and (v) a discussion on lean bundles. Section two delves into HRM bundle of lean and topics on HR-enabled lean service. In doing so, it starts with discussing the concepts of HRM and HRM practices. It, then, explains what is meant by an ‘HRM bundle’. After that, it reviews the mediating role of HRM practices to support lean practices. This is followed by a discussion on how the human element of lean is prescribed to be managed and directed to support lean. Then, the existing understanding around enabling HRM practices are thoroughly and critically reviewed. Towards the end of the chapter, the research gap is presented and debated and, then, a summary of the chapter is provided.

Chapter outline

2.1 Introduction ............................................................................................................. 14
2.2 Lean service ............................................................................................................ 15
   2.2.1 Genealogy of lean ......................................................................................... 15
   2.2.2 Defining the concept of ‘lean’ ....................................................................... 17
   2.2.3 Lean in the service sector ............................................................................. 18
       2.2.3.1 Defining the concepts of ‘service’ and ‘service sector’ ....................... 18
       2.2.3.2 Service vs manufacturing: the differences ........................................ 19
       2.2.3.3 Application of lean in the service sector ........................................... 22
       2.2.3.4 Lean objectives and types of waste .................................................... 25
       2.2.3.5 A critical perspective on lean management ....................................... 28
       2.2.3.6 Lean abstraction levels ...................................................................... 33
       2.2.3.7 The four bundles of lean .................................................................. 34
2.3 HRM practices and lean service .......................................................................... 37
   2.3.1 Defining ‘HR’ and ‘HRM’ ............................................................................ 37
   2.3.2 HRM bundle: bundling and rationale for it ................................................ 38
   2.3.3 Managing and directing the human element of lean ................................... 42
   2.3.4 Enabling HRM practices ............................................................................. 46
   2.3.5 Mediating role of HRM practices ................................................................ 64
2.4 Research focus ........................................................................................................ 70
   2.4.1 Research gaps and research question ......................................................... 70
   2.4.2 Reflections on literature review .................................................................... 72
   2.4.3 Underpinning theories to answer research questions ................................. 74
2.5 Summary of chapter .............................................................................................. 79
2.1 Introduction

Although lean originated in the manufacturing sector, its potential to improve services is increasingly realised (Suárez-Barraza, Smith and Dahlgaard-Park, 2012). Service organisations employ lean methodology to, among other objectives, improve their service delivery processes (Piercy and Rich, 2009). Such improvement initiatives aim to eliminate waste and create more value for customers (Bowen and Youngdahl, 1998). Scholars argue that lean service has helped organisations with the delivery of services in shorter time with better quality and quantity of services provided (Lorden et al., 2014). They also advise that lean tools help organisations to promote employee innovative ideas in service delivery processes (Lindskog, Hemphälä and Eriksson, 2017).

However, recent evidence also suggests that lean is not a mere application of lean tools and techniques (Bortolotti, Boscarini and Danese, 2015). It requires the effective involvement and buy-in of the workforce of service organisations (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). It necessitates that service organisations endorse new working methods, practices and employee behavioural patterns (V. Wickramasinghe and Wickramasinghe, 2017b). For that reason, they need to utilise enabling HRM practices—in the form of a bundle—to orient their employees towards lean practices and improve their buy-in to lean ways of working.

One of the most important current discussion in this area is that despite the crucial role of HRM practices to support lean service, our understanding of how service organisations utilise such practices is outstandingly limited (Sunder, Ganesh and Marathe, 2018). One major issue is that there is a significant ambiguity around the HRM practices that service organisations utilise to enable their workforce to support lean. There is a lack of consensus about the number, the use of specific HRM practices and the relevance of HRM practices to lean service. There is also a lack of contextual and real-world understanding of prescribed lean-relevant HRM practices in the literature. In the rest of this chapter, this gap in understanding is thoroughly discussed and debated.
2.2 Lean service

2.2.1 Genealogy of lean

The term ‘lean’ was initiated in the manufacturing sector to refer to a set of management practices geared towards improvements in the efficiency of production (Holweg, 2007). It was first used by Krafcik (1988) to specifically describe the Toyota Production System (TPS) and was later popularised in the West by Womack, Jones and Roos (1990) in *The Machine that Changed the World*.

Some scholars (e.g., Delbridge, 2003; Arlbjørn and Freytag, 2013) rationalise that lean is an improved version of the ‘time and motion’ studies of Taylor ([1911] 2003). However, lean, as it is known today, has evolved over a long period to meet organisations’ needs beyond manufacturing. And so, Holweg (2007) argues that lean is not an invented system; it is rather the product of continuously borrowing from several management disciplines.

The literature on lean has highlighted that the Toyota Company, at the initial stages of its establishment, adopted lean mainly to reduce operational costs and improve the efficiency of its production processes (Radnor, 2012). In their seminal text, Womack, Jones and Roos (1990) devoted some attention to the challenges in the Japanese context for which the Toyota Company had to develop TPS. Overall, they have indicated the challenges below:

- Japan was a small market for the motor industry and the demand from that market was varied. The Toyota Company had to be flexible in responding to changes in demand.
- The individuals who constituted the Company workforce were from agricultural background. The Company had to standardise and streamline production processes. Its workforce had to be trained to run its standardised production processes as efficiently as possible.
- Workers, in the Japanese context, were resistant to being treated as cogs (replaceable parts). Dismissing employees were a hard option. The Company therefore had to provide jobs for life for its employees and invest in its workforce in terms of training and development.
- Japanese government discouraged Japanese companies from recruiting non-Japanese workers. The Toyota Company therefore had to recruit its workforce from the available Japanese workers.
- Japan was a war-torn country then and sources of capital for Toyota were scarce.
• Toyota also had to compete in a highly competitive international motor industry.

Two important themes emerge from the points that have been discussed so far that lean is not: (i) a panacea and (ii) an outdated system. First, one should not think that lean is a panacea for all organisational problems. It has been frequently applied in business sectors other than manufacturing (Cudney, Furterer and Dietrich, 2014). Significant potentials have been achieved in such sectors using lean methodology (Sunder, Ganesh and Marathe, 2018). However, there have also been some reports where employing lean tools and techniques adversely impacted the employees of an organisation (e.g., Carter et al., 2013). While one could argue that lean is not a panacea, other studies have concluded that lean failure is mainly because of not properly orienting its human element to support it (e.g., Bonavia and Marin-Garcia, 2011). Second, commenting on lean, Radnor (2012) argues that it is still relevant to the business world of today. Several scholars have reasoned this understanding that the philosophy of lean—create value and reduce waste—is still applicable and broad enough to fit contexts beyond manufacturing (Bowen and Youngdahl, 1998).

In recent years, in the service sector, the application of lean has gained increased attention (Piercy and Rich, 2009; Suárez-Barraza, Smith and Dahlgaard-Park, 2012). This recent literature responds to Bowen and Youngdahl’s (1998) earlier argument in favour of transferring lean from a manufacturing context to a service context. They justified that lean is suitable for a service context and yields similar benefits to those in a manufacturing context. Therefore, since the publication of their research, lean application has been extended to the service sector and a proliferation of research on lean service has been published (e.g., Ahlstrom, 2004; Abdi, Shavarini and Seyed Hoseini, 2006; Hanna, 2007; Suárez-Barraza, Smith and Dahlgaard-Park, 2012; Radnor and Osborne, 2013).

To conclude this section, the existing literature identifies that lean was initiated in the manufacturing sector but has been extended to the service context. In the service context, however, orienting the human element of lean is vital to support lean service because characteristics of service such as duality nature of services requires a thorough understanding of a service and its customers and what it takes to improve it (Sampson, 2000). Further, although the concept of ‘lean’ was intended to mean ‘reduce waste and create value’, taking into consideration the long history of lean, it has progressed. Therefore, in this context, it is necessary to discuss and understand the definition of lean through its journey from
manufacturing to service. Hence, the following sub-section discusses what ‘lean’ really means in general and the specific definition of lean, which is adopted in this research, before discussing lean in the specific context of service sector.

### 2.2.2 Defining the concept of ‘lean’

‘Lean’ is a management philosophy that promotes a systematic elimination of waste to create value across an organisation (Hines, Holweg and Rich, 2004). However, the existing literature suggests that this definition is one of the many definitions of lean that have been proposed by scholars (Arlbjørn and Freytag, 2013). Taken together, they indicate that lean does not have a concise definition.

Scholars offer several definitions to capture the essence of ‘lean’. Some of them have defined it as a set of management tools (Beauvallet and Houy, 2010) to do more with less (Radnor and Boaden, 2004). Others have found it to mean a combination of operations and human resource management (Sparrow, Hird and Cooper, 2014); and, thus, an amalgamation of various management practices to eliminate waste across an organisation (Womack, Jones and Roos, 1990). Some others have defined it as a socio-technical managerial approach that attempts to improve organisational processes (Bortolotti, Boscari and Danese, 2015) by striping an organisation of waste (Forrester, 1995). Yet, some others have found it to mean a system of interrelated and complementary four bundles of practices: Just-in-time (JIT), Total quality management (TQM), Total preventative maintenance (TPM) and Human resource management (HRM) (Shah and Ward, 2003; Dal Pont, Furlan and Vinelli, 2008).

Accordingly, a single, concise and comprehensive definition of lean has not been agreed within the existing literature. Such a definition is theoretically and practically far from reality. Because organisations implement lean for various objectives (Arlbjørn and Freytag, 2013), no definition may possibly capture the various objectives of lean. The rationale behind such variation of the definitions is that each definition depicts a different abstraction level of lean usage in organisations (Modig and Ahlstrom, 2012). Organisations view it as a philosophy, a set of principles or a set of tools and techniques.

The definition that has been adopted in this thesis is that “Lean is a bottom up approach where management plays a supportive and facilitating role in engaging shop-floor workers to
form cross-functional self-directed work teams and apply Lean tools.” (Shah, Chandrasekaran and Linderman, 2008, p. 6683) The justification for adopting this definition is that it combines two major components of any lean programme: (i) the tools and techniques of lean and (ii) the people who work with these tools and techniques. These two components were also originally included in Ohno’s (1988) description of the Toyota Production System.

To further understand lean, in the coming sub-sections, its abstraction levels and objectives are discussed (see 2.2.3.4 Lean objectives and 2.2.3.6 Lean abstraction levels). For that purpose, the discussion now turns to the application of lean in the service sector.

2.2.3 Lean in the service sector

2.2.3.1 Defining the concepts of ‘service’ and ‘service sector’

Service refers to “the policies, practices and procedures of organizations for the delivery of the organization’s tangibles (products) or intangibles (experiences) to customers” (Schneider, 1994, p. 64). Accordingly, service delivery consists of several processes (Johnston and Clark, 2005). Each process describes and prescribes the required procedure to be followed in delivering a certain type of service and how the relevant resources interact (Johnston and Clark, 2005).

While service delivery consists of several processes and these processes are varied and complex; together, they create customer experience (Johnston and Clark, 2005). These service processes depend on skills, knowhow, knowledge, expertise and experience of employees (i.e. human resources of a service organisation) (Johnston and Clark, 2005). Though this reliance on human capital depends on the nature of a service (Chase, 1981).

On the other hand, ‘service sector’ is referred to as the tertiary sector or service industry. It is an umbrella term for numerous service industries such as medical services, legal services, education, restaurants and banks (National Statistics Office, 2009). A comprehensive list and categorisation of service industries in the UK is provided in the UK Standard Industrial Classification of Economic Activities (SIC) 2007 (Companies House, 2015).

As the name suggests, the service sector produces services. ‘Tertiary’ indicates that it comes as the third sector after agriculture (primary) and manufacturing (secondary). Normally,
service production heavily depends on employees of service organisations. So, in service
delivery, people offer their knowledge, knowhow, expertise, experience and time to attend to,
advice, give access to, share experience and discuss an issue; i.e. the service sector is
therefore often labour intensive (Chase, 1981).

For the last fifteen years, the service sector has grown significantly (Piercy and Rich, 2009).
For instance, in the UK, of the 32.21 million employed people, as of March 2017, 83.5% are
employed in the service sector (Office for National Statistics, 2017). The percentage of
employment in the service sector in the UK has gradually increased since June 1978. That’s
to say, an increase of 20% from 63.2% to 83.5% between June 1978 to and March 2017
(Office for National Statistics, 2017). While the percentage of people working in
manufacturing in the UK for the same period has decreased from 26.4% to 7.7% (Office for

Along with the growth of the service sector in the UK, lean service in the sector is receiving
growing attention: “Lean’s significant potential for the services industry has also been
realized.” (Sunder, Ganesh and Marathe, 2018, p. 150) Service organisations have shown
interest in lean and the application of its philosophy, principles and tools and techniques to
service delivery processes aiming to create value for their customers and reduce waste
(Piercy and Rich, 2009). “Lean has demonstrably helped organisations achieve on-time
delivery of the right quality and quantity of services to satisfy customers.” (Sunder, Ganesh
and Marathe, 2018, p. 150)

To further elaborate this point, the following sub-sections discuss ‘service vs manufacturing’
and lean in the service sector. Although service and manufacturing share similarities, they
also have key differences. Understanding the differences further highlights the gap in our
understanding about utilising HRM practices to support lean service.

2.2.3.2 Service vs manufacturing: the differences

Research into service has suggested several differences between service and manufacturing
(Radnor and Osborne, 2013, 2016). These differences include (i) the often-labour-intensive
nature of service organisations, (ii) customer involvement in production of services, (iii)
service heterogeneity and difficulty in measuring service quality, (iv) intangibility of
services, (v) simultaneity of production and consumption of services and (vi) duality nature of services. These differences are further explained in this section.

Delivery of services often requires an organisation to maintain several manual processes. Automation and standardisation of majority of these manual processes are less likely with current technological advancement. Consequently, service provision requires the interaction of human beings i.e. labour intensive (Sengupta, Heiser and Cook, 2006). In addition, service organisations often find it hard to draw a mutually exclusive list of inputs of their services as they provide heterogeneous services using generic inputs such as human resources. Hence, to improve service delivery, they ought to employ advanced practices of scheduling and HRM practices to coordinate people and direct them to support continuous improvement initiatives.

Customer often plays a vital role in service delivery processes (Ellram, Tate and Billington, 2006). Employees of a service organisation therefore need to be at least properly recruited and trained to treat customers in the best interest of their organisation. It occurs that sometimes a customer is not sure of the exact specifications of a type of service being requested. In such situations, a standardised manual, as in a manufacturing context, might help an employee to handle a customer request to some degree. However, a distinctive customer need requires an employee to use their discretion to satisfy such needs. Without proper utilisation of employee empowerment and involvement, an employee might be unable to use their discretionary behaviour to assist a customer with a distinctive need.

When customer is involved in service delivery, the provided service tends to be heterogeneous (Ellram, Tate and Billington, 2006). Customers with distinctive needs could significantly change the content and/or the manual processes of service delivery leading to impacts on quality of the service provided. Furthermore, overloaded service delivery processes could also lead to deteriorating service quality than prolonging lead time of delivery as it is the case in manufacturing. Moreover, unlike manufacturing, service providers such as banks could have thousands of local branches and each local branch could necessarily have their own strategic priorities in serving certain kind of customers and/or providing certain types of services. Heterogeneity of service provision not only makes standardisation and automation less likely of the same scale in manufacturing but also gives edge to employees of a service organisation in maintaining and improving services. Service heterogeneity also makes it difficult to measure the quality of a service quality (Zeithaml,
Berry and Parasuraman, 1996). In the absence of HRM practices such as performance management, reward and recognition and employee communication, applying lean service could lead to a limited application of lean tools and techniques.

Furthermore, unlike manufacturing, services are often intangible such as education, caring or consultancy (Sampson, 2000). Therefore, they are less likely to be stored. Service managers are often unable to buffer services by inventory like manufacturing to ensure capacity flexibility (Akkermans and Vos, 2009). This characteristic of service activities has further implications when HRM practices such as recruitment, selection and hiring and training do not provide timely needed human resources to meet shift in service demands.

Another difference is the simultaneity of production and consumption of services (Sampson, 2000). This denotes that services are often created and consumed with no time between service creation and consumption. One implication is that there is no lead time between creation and consumption to create buffer against uncertainties. Another implication is that service location is closer to customers and employees. Therefore, a service organisation not only requires a quality workforce to serve front-end and back-end of service delivery but also a flexible capacity of human resources.

Lastly, services often have a duality nature, meaning that a service activity does not initiate until a request is put forward from a customer (Sampson, 2000). For instance, a bank consultant does not open a credit/debit account for a customer until the customer requests one. Similarly, a customer supplies a malfunctioning device to receive repairing services for it. Therefore, a service activity cannot start until a customer request it. One implication is that operational managers and employees in service organisations need to be aware of all the minute specifications of a service activity before making any decision to provide it. Another implication is that the application of lean to a service requires a thorough understanding of the service and its customers and what it takes to improve it.

Understanding these differences highlight that directing and managing the human element (i.e. human resources) of lean service heavily depend on the employed HRM practices by a service organisation to support lean practices.
2.2.3.3 Application of lean in the service sector

Despite resistance to lean from the 1980s to the 1990s because of the perception that lean principles are manufacturing principles, it is now widely adopted in the service sector (Suárez-Barraza, Smith and Dahlgaard-Park, 2012). Since ‘service’ is not concerned with making a ‘tangible product’ (Johnston and Clark, 2005), lean in the service sector requires adaptation to fit that context (Bowen and Youngdahl, 1998). Subsequently, lean has now extended its reach beyond manufacturing (Hines, Holweg and Rich, 2004). For instance, it is a popular approach to reform public services in the UK, mainly, to: (i) improve service quality, (ii) better utilise resources and (iii) keep services productive (Radnor and Osborne, 2016).

The extant literature reports several examples of ‘successful’ lean application in services, for instance:

- The U.S. Military Academy employed lean to improve administrative processes (Klein and Enos, 2017). Particularly, the government purchase card (GPC) approval process within the Dean’s staff office at the Academy had to go through several red-tape formalities (Klein and Enos, 2017). By employing lean principles, the processing time of the GPC approval was reduced in half and the quality associated with this process was significantly improved (Klein and Enos, 2017). Lean principles also enabled the Academy to keep the approval process under control and reduce the mistakes in turn-in documentation (Klein and Enos, 2017).

- PolicyCo, BankCo and ClaimCo provide call services to financial service organisations in the UK (Piercy and Rich, 2009). The companies came under pressure to reduce operating costs, reduce customer complaints and improve quality of services (Piercy and Rich, 2009). By employing lean service principles, they were able to standardise operational processes of call screening, routing and referring (Piercy and Rich, 2009). This subsequently reduced work-in-progress buffers, increased first-time customer claim processing, reduced reliance on off-shoring staff and reduced cost (Piercy and Rich, 2009).

- A public ordinary telephone (POT) service provider, through subscription system for access network, aims to provide the most economical means of transmission over long distances (Arbós, 2002). However, the POT-type service provider, due to changes in circumstances of competition for a faster and lower cost voice services, found itself in a
struggle to compete (Arbós, 2002). By employing principles of lean service, the company was able to reduce the lead time and cost of transmission and switching, activation, operations and maintenance and registration services (Arbós, 2002). As a result, the total services (17 sub-services) took five days i.e. 12 days less than these services used to take prior to employing lean service principles (Arbós, 2002).

Organisations that engage in the provision of services have used lean service to improve service provision. The existing literature reports several benefits of lean service to these organisations (see Table 1).

### Table 1: Reported benefits of lean service

<table>
<thead>
<tr>
<th>Service activity</th>
<th>Reported benefit(s)</th>
<th>References(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking and financial services</td>
<td>• Increase in service output&lt;br&gt;• Improve in customer satisfaction&lt;br&gt;• Serve more customers&lt;br&gt;• Reduce time required to deliver services&lt;br&gt;• Increase in service capacity&lt;br&gt;• Improve in efficiency of service delivery processes</td>
<td>(e.g., Delgado, Ferreira and Branco, 2010; Vashishth, Chakraborty and Antony, 2017)</td>
</tr>
<tr>
<td>Public sector and government</td>
<td>• Increase in service output&lt;br&gt;• Improve quality of service&lt;br&gt;• Reduce waste in service delivery processes&lt;br&gt;• Map and streamline service delivery processes&lt;br&gt;• Standardise service delivery processes</td>
<td>(e.g., Radnor, 2010; Radnor and Johnston, 2013)</td>
</tr>
<tr>
<td>Health services</td>
<td>• Reduce length of stay of patients&lt;br&gt;• Release and free patient beds&lt;br&gt;• Improve accessibility to health services&lt;br&gt;• Reduce ‘no-show’ cases&lt;br&gt;• Increase service capacity&lt;br&gt;• Increase timely access to health services&lt;br&gt;• Increase service output</td>
<td>(e.g., LaGanga, 2011; Meredith et al., 2011; Díaz, Pons and Solís, 2012; Burgess and Radnor, 2013; Chiarini and Baccarani, 2016)</td>
</tr>
<tr>
<td>Services</td>
<td>Benefits</td>
<td>References</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Call centre services</td>
<td>Reduce change overtime of medical equipment</td>
<td>(e.g., Laureani and Antony, 2010; Holden and Hackbart, 2012)</td>
</tr>
<tr>
<td></td>
<td>Decrease operative time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce medical errors and waiting time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Balance supply and demand of health service provision and reduce cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase quality of healthcare</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve patients’ experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve health service delivery efficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decrease turnaround time of operating rooms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce number of rescheduled or cancelled operations</td>
<td></td>
</tr>
<tr>
<td>Call centre services</td>
<td>Streamline service delivery processes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase first-call resolution ratio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce operator turnover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce re-opened requests</td>
<td></td>
</tr>
<tr>
<td>Education services</td>
<td>Shorten the delivery time of the knowledge in use</td>
<td>(e.g., Doman, 2011; Isaksson, Kuttainen and Garvare, 2013)</td>
</tr>
<tr>
<td></td>
<td>Provide quicker access to knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Run flexible courses in terms of content and duration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve administrative processes</td>
<td></td>
</tr>
<tr>
<td>IT services</td>
<td>Improve efficiency</td>
<td>(e.g., Malladi, Dominic and Kamil, 2011; Staats, Brunner and Upton, 2011)</td>
</tr>
<tr>
<td></td>
<td>Increase service output</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase the number of continuous improvement ideas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce and manage variation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduce rework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase quality of service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve operational performance</td>
<td></td>
</tr>
</tbody>
</table>
One can therefore advocate, from the existing literature, that lean service has two drivers: (i) ‘market driver’ and (ii) ‘efficiency driver’ (Radnor and Johnston, 2013). The ‘market driver’ denotes that a service organisation employs lean to focus on what makes value for its customers. Whereas the ‘efficiency driver’ is to focus on improving service delivery processes. In order to realise the benefits of lean service (see Table 1), these two drivers do need to exist simultaneously (Radnor and Johnston, 2013).

However, service organisations do not only have ‘customers’ and ‘processes’. They also have people who drive service delivery processes that provide value to customers. For that reason, to fully realise the benefits of lean service, service organisations need to actively involve their ‘human resources’ in lean practices (Sparrow, Hird and Cooper, 2014). Therefore, lean deployment necessitates effective involvement and buy-in of the workforce of a service organisation in lean (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). For that purpose, they need to utilise enabling HRM to orient their employees towards lean service and obtain their buy-in to lean way of working (Sparrow, Hird and Cooper, 2014). Before further discussing utilising HRM practices, the following section discusses the objectives of lean in the service sector.

2.2.3.4 Lean objectives and types of waste

Service organisations employ lean tools and techniques for several reasons (discussed in this section). However, the main and overwhelming reported reason in the literature for lean application is to eliminate waste.

‘Waste’ is defined as “any human activity which absorbs resources but creates no value” (Womack and Jones, 2003, p. 15). The existing literature provides several examples of how service organisations by employing lean practices have eliminated waste from their service delivery processes (see 2.2.3.3 Application of lean in the service sector). Other objectives of employing lean by service organisations include to: (i) increase performance, (ii) improve workflow, (iii) improve customer experience, (iv) reduce cost, (v) reduce time of service delivery, (vi) improve quality, (vii) increase service capacity and (viii) manage variation. These objectives are further discussed in Table 2.
### Table 2: Objectives of lean service

<table>
<thead>
<tr>
<th>Objective</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase performance</td>
<td>Lean contributes to the effectiveness of a service organisation and positively impacts its financial and operational performance (Hadid, Mansouri and Galleear, 2016).</td>
</tr>
<tr>
<td>Improve workflow</td>
<td>Jefferson Pilot Financial improved work-flow of its service provision as a result of employing lean practices (Swank, 2003).</td>
</tr>
<tr>
<td>Improve customer experience</td>
<td>Employing lean service enables service organisations to improve customer experience (Womack and Jones, 2005).</td>
</tr>
<tr>
<td>Reduce cost</td>
<td>Three UK-based call service centres reduced their cost after employing lean tools and techniques (Piercy and Rich, 2009).</td>
</tr>
<tr>
<td>Reduce time of service delivery</td>
<td>Suárez-Barraza and Ramis-Pujol (2010) report that lean service helped service organisations to reduce time of service delivery from human resource processes.</td>
</tr>
<tr>
<td>Improve quality</td>
<td>Radnor and Walley (2008) discuss how lean practices helped service organisations to improve quality of their service delivery.</td>
</tr>
<tr>
<td>Increase service capacity</td>
<td>A mental health centre implemented lean and increased its service capacity by 27% in patient admittance (LaGanga, 2011, p. 422).</td>
</tr>
<tr>
<td>Manage variations</td>
<td>An insurance company employed lean service and achieved positive results by following ‘a rigorous five-phase process’ (Allway and Corbett, 2002, p. 45).</td>
</tr>
</tbody>
</table>

Taken together, Table 2 highlights that lean tools and techniques are powerful in uncovering several types of waste in an organisation. These types, discussed in Table 3, are (i) Defects, (ii) Overproduction, (iii) Waiting, (iv) Not utilizing talent, (v) Transportation, (vi) Inventory excess, (vii) Motion waste and (viii) Excess processing (Womack and Jones, 2003).
<table>
<thead>
<tr>
<th>Type of waste</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defects</td>
<td>Mistakes that require additional time, resources and finances to fix. A defect might involve delivering a customer the wrong type of service. This could result from poor quality controls, poor documentation, lack of service delivery standards, misunderstanding customer needs and poor design of service delivery.</td>
</tr>
<tr>
<td>Overproduction</td>
<td>Blindly keep delivering a service even when those who receive this service either are not ready for it or do not need it. This could be because of unclear customer needs, long lead time of service delivery, poorly applied automation and/or poor service delivery forecasts.</td>
</tr>
<tr>
<td>Waiting</td>
<td>Service delivery must stop for some reason such as the next person in line does not show up or something does not work or waiting for approval to deliver one part of a service. This could result from unbalanced workloads, unplanned closures, insufficient staffing, poor process quality, poor communication and work absences.</td>
</tr>
<tr>
<td>Not utilizing talent</td>
<td>Not utilizing or under-utilising people’s talent, skills and knowledge at the workplace. This could happen because of assigning employees to wrong tasks, wasteful admin tasks, poor communication, poor teamwork, inappropriate management and/or insufficient training.</td>
</tr>
<tr>
<td>Transportation</td>
<td>This type of waste caused by moving things around. Examples of causes that lead to this kind of waste include poor office layout, unnecessary or excessive steps in service delivery, misaligned service delivery process flow and for poorly-designed systems of service delivery.</td>
</tr>
<tr>
<td>Inventory excess</td>
<td>This type of waste occurs when there is supply in excess of real customer demands for a particular service. This could result from buffers of service, poor monitoring systems, mismatch between customer demands and service delivery, unreliable service delivery and for misunderstanding customer needs.</td>
</tr>
</tbody>
</table>
### Motion waste

Any excess movement by employees to deliver a service especially when such extra movements do not add to the service. This could result, for instance, from poor service process design, poor workplace communication, isolated employees and siloed operations and/or lack of service delivery standards.

### Excess processing

This often results from the delivery of various forms of the same service more than is required, or a long, poorly-designed service delivery process. Examples of such type of waste include excessive reporting, acquiring multiple signatures, creating duplicate data, lacking service delivery standards, poor communication, misunderstanding customer needs and/or other human error.

Overall, lean service provides service organisations with powerful tools and techniques to uncover various types of waste in service delivery processes. However, how much lean service can do for an organisation also depends on the lean maturity stage and the abstraction level of lean in an organisation. Therefore, the next sections present a critical perspective on lean management and discuss the lean abstraction levels to understand the choices organisations usually make about lean philosophy, principles and tools and techniques as part of lean implementation.

#### 2.2.3.5 A critical perspective on lean management

Lean management is criticised in the academic literature to (i) be a management-by-stress approach, (ii) have a deleterious effect on employee health, (iii) intensify work and extend working hours, (iv) strip employees of their tacit knowledge and skills, (v) repress organised labour, (vi) have limited or doubtful benefits and (vii) offer nothing new. These criticisms are discussed in this section and counter arguments are also provided from the advocates of lean from the academic community.

Lean, as a management approach, has brought significant changes to services and manufacturing in the last two decades in different business contexts around the world (Bouville and Alis, 2014). However, these changes and the application of lean management have attracted several criticisms from the academic community. One such a criticism is that lean is a ‘management-by-stress’ approach (Moody, 1997). It is suggested that lean stretches
every phase of production (and/or service provision) to almost the ‘breaking point’ (Moody, 1997, p. 87). Such stretching is achieved through the reduction of the available material or human resources to produce a unit (or provide a service) and the constant readjustment of the production system (or service delivery processes) to cope with the reduction of resources (Moody, 1997).

However, proponents of lean argue that viewing lean as ‘mean’ is a matter of perspective (Babson, 1993; Emiliani, 2011; Procter and Radnor, 2016). Since there is no consensus in the academic community on the course of action an organisation to follow to implement and deploy lean (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017), lean has to be researched, evaluated and understood from multiple perspectives (Radnor, 2011). They suggest that the existing application of lean in organisations usually focus on tools and techniques to improve operational performance of an organisation; thus, neglecting the human element of lean (Conti et al., 2006; Dahlgaard and Dahlgaard-Park, 2006). Organisations are therefore rather tactical and reactive when it comes to dealing with the human element of lean (Sparrow and Otaye-Ebede, 2014). When organisations wrongly understand lean as a set of tools and techniques; consequently, they fail in motivating and directing their workforce to support lean practices (Spear, 2004). Sawhney and Chason (2005) and Pedersen and Huniche (2011) argue that the stress that might accompany lean implementation is therefore the result of improper management of the human element of lean. The proper management of the human element of lean reduces stress from lean management and deals with employee resistance by training them in lean knowledge and know-how (Liker and Rother, 2011; Pedersen and Huniche, 2011).

The second criticism to lean management is that it has deleterious effect on the health of employees (Bouville and Alis, 2014). Bouville and Alis (2014) suggest that this deleterious effect results from employing several lean work organisation practices such as delegation of responsibilities, problem-solving demand, standardization and job rotation. These practices in the form of a bundle usually have negative consequences on the attitude and health of employees at work under lean management (Bouville and Alis, 2014). Other scholars (e.g., Carter et al., 2011, 2013) argue for similar line of thinking that lean has deleterious effect on employees well-being and their working lives. Carter et al. (2013) also reported that lean management has resulted in significant increase in the number of ill-health reports, especially among women employees. Previously, Carter et al. (2011) have also warned that such a
detrimental effect will have negative consequences in terms of the quality of services provided by affected employees.

However, several scholars (e.g., Conti et al., 2006; Bouville and Alis, 2014; Neirotti, 2018) argue that such a deleterious effect from lean management results from the quality of management. This could also be the result of that “Breaks are reduced to the absolute minimum and the "pores" of working time are filled in.” (Moody, 1997, p. 88) Bouville and Alis (2014) found that ‘quality management’ has a direct positive relationship with employee health at work under lean management. This understanding is also shared by some opponents of lean management (e.g., Moody, 1997, p. 89) that “the authority to make changes remains in management's hands.” In view of that, the value and behaviour of managers in charge of lean management significantly impact the quality of management provided under lean (van Dun, Hicks and Wilderom, 2017). Examples of such values include: “honesty, candor, participation and teamwork, and continuous improvement”; and of such behaviours include: “positive relations-oriented “active listening” and “agreeing” behaviors” (van Dun, Hicks and Wilderom, 2017, p. 174). This line of thinking has also previously been supported: “Results indicate that LP is not inherently stressful, with stress levels significantly related to management decisions in designing and operating LP systems.” (Conti et al., 2006, p. 1013) A very recent research inquiry also highlights that employee involvement in lean decision making significantly impact the well-being of employees: “the overall impact of lean production on worker well-being is likely to depend on the ways in which managers create scope for worker involvement in decision-making, target resources to the specific job demands, and adjust resource levels to the degree of these demands.” (Huo and Boxall, 2018, p. 569)

The third criticism of lean management is that it intensifies work for employees and extend their working hours (Moody, 1997). Some scholars (e.g., Moody, 1997) argue that the intensification of work and extension of working hours do not increase employee wages; instead, they progressively lead to lower wages. Such intensification of work and extension of working hours result from eliminating non-value adding labour hours and cutting costs (Moody, 1997). However, advocates of lean argue that eliminating non-value adding activities is the main purpose of lean management (Womack and Jones, 2003) Further, elimination of waste is necessary for organisations to provide quality products and efficient and effective services (Radnor, 2011). Additionally, recent research also has suggested that
work intensification does not directly impact employee satisfaction about their work under lean management (Neirotti, 2018).

The fourth criticism of lean management is that it strips employees of their tacit knowledge and skills (Moody, 1997). Streamlining processes, as part of lean management, continuously borrows from knowledge and skills of employees and such knowledge and skills are gradually known to their organisation (Moody, 1997). Therefore, this is believed to happen in a lean context as employees are required to make their knowledge and skill known to management in their organisation regularly (Moody, 1997) However, advocates of lean (e.g., Procter and Radnor, 2014) argue that under lean management employees are trained on a wide variety of skills in order to be able to troubleshoot issues and be flexible in rotating tasks. Other scholars (e.g., Carter et al., 2016) acknowledge that under lean management employees are expected to be better skilled; however, they also suggest that such upskilling of employees rarely happens. Therefore, one can assume that deskilling and stripping employees of their tacit knowledge happen as the result of interpretation of lean rather than to be an intrinsic characteristic of lean management.

The fifth criticism of lean is that it represses organised labour (Moody, 1997). Some scholars (e.g., Godard, 1998) argue that organisations might avoid the involvement of unionised workers in lean implementation. There are also some other suggestions in the literature that the defeat of unions in the Japanese context in the early 1950s provided the Toyota Company with the opportunity to kickstart lean management (Moody, 1997). One implication here is that lean management does not work in a context with organised labour and unions. However, the existing literature provides examples of contexts where lean management has worked despite the presence of organised labour and unions (Delbridge, 2003). Moreover, the literature also suggests that organised labour or union intervention can focus on challenging unilateral management control of lean implementation and how its practise are interpreted (Babson, 1993).

The sixth criticism to lean management is that its benefits is too ‘little’ or doubtful (Arfmann and Barbe, 2014). The efficiencies and benefits achieved through lean management is argued to be marginal (Moody, 1997). Some scholars (e.g., Arfmann and Barbe, 2014) extend this argument and state that the benefits of lean in a service context are doubtful because lean is a production practice and the customer ‘pull’ concept of lean does not work in a service
context. Other scholars (e.g., Carter et al., 2011, 2013) also suggest that the detrimental effect of lean management on employees and their health and life has negative consequences on the quality of service provision.

On the other hand, proponents of lean (e.g., Piercy and Rich, 2009; Radnor, 2011) argue that lean has a proven track record of helping organisations to achieve more efficiencies. Examples of such efficiencies include (also see 2.2.3.3 Application of lean in the service sector) enabling organisations to address financial difficulties in a systematic way, restructuring businesses to respond to market demands and addressing labour shortages (Radnor, 2011). However, it is necessary to acknowledge that the philosophy of lean is built on gradual continuous small changes that lead to efficiencies (Ohno, 1988; Bhasin and Burcher, 2006). Therefore, one can argue that lean is least expected to bring about radical and abrupt changes towards efficiencies; it rather aims at “continuous search for marginal improvements in costs by constantly stressing and readjusting the production system and, above all, the labor process.” (Moody, 1997, p. 87)

The last criticism to lean management is that it offers nothing new; it simply is a mixture of selected management tools and techniques in the past (Moody, 1997). Moody (1997) argues that lean management is a combination of labour-intensive assembly line practices of Ford and time and motion studies of scientific management. Therefore, it is believed that lean management resembles Ford assembly lines in that it is “directed at producing for mass markets.” (Moody, 1997, p. 86) Further, it is a “variable mixture of discrete elements, selectively recombined on a case-by-case basis.” (Moody, 1997, p. 106) One rationale for this argument is that lean management designs and re-designs jobs through time and motion measurement tools of scientific management (Moody, 1997).

On the other hand, advocates of lean (e.g., Holweg, 2007) seems to agree that lean is not a single point invention. It is a management approach that borrows from multiple management disciplines (Holweg, 2007). Rather than considering such borrowing as a limitation, it is perceived to give strengthen to lean management (Holweg, 2007). Borrowing successful examples of management practices enables lean management to further achieve its main objective of reducing waste and creating value for customers (Womack, Jones and Roos, 1990). The proponents of lean management (e.g., Womack, Jones and Roos, 1990) also agree that lean could do a ‘good job’ in producing for mass markets. However, they disagree that
lean originally was conceived to serve mass markets; it was developed to serve the Japanese
market which was a small market for the motor industry and the demand from that market
was varied (Womack, Jones and Roos, 1990).

This section discussed the various criticisms of lean management from the viewpoints of
opponents and proponents of lean management. The discussion suggests that this argument
keeps growing as both sides of the argument provide more empirical results to support their
viewpoints. The key takeaway lesson here is that this argument significantly depends on
‘what lean is or could be’ for both sides of the argument (Procter and Radnor, 2016). Also,
the opponents of lean management (e.g., Mehri, 2006) seems to agree with this conclusion
that to understand lean management, it is “fundamental to understanding Japanese culture and
business: tatemae (what you are supposed to feel or do) and honne (what you actually feel or
do).” (Mehri, 2006, p. 21)

2.2.3.6 Lean abstraction levels

‘Lean’ is viewed from different abstraction levels (Modig and Ahlstrom, 2012). The main
rationale for the variation in the application of lean therefore is that it could mean a
philosophy, a set of principles, a set of tools, a strategic approach, an operational approach, a
complete system and a Rapid Improvement Event (RIE). This section discusses the three
streams of lean abstraction levels in the existing literature.

The first stream of literature views lean to have three levels (i.e. lean is applied in three
forms): (i) philosophy, (ii) principles and (iii) tools and techniques (Modig and Ahlstrom,
2012). Lean as a philosophy is concerned with elimination of waste and creation of value
across an organisation (Hines, Holweg and Rich, 2004). As a principle, its application
focuses on customers and value provision to them (Arlbjørn and Freytag, 2013). For that
purpose, there are five principles assigned to lean: (i) identify what creates value for
customers, (ii) map the value stream, (iii) create flow, (iv) establish pull and (v) seek
perfection (Womack and Jones, 2003). As tools and techniques, the scale of lean is bound to
the application of lean tools and techniques to specific areas of a business in an organisation
(summary of lean tools are provided by Bicheno, 2008; Arlbjørn, Freytag and de Haas, 2011).
The second stream views lean at (i) a philosophical (or strategic) level and (ii) a technical (or operational) level (Bortolotti, Boscari and Danese, 2015). At a strategic level, lean is concerned with the integration of Womack and Jones’ (2003) lean principles into every aspect of the operations of an organisation. Lean, on a technical level, is about the application of lean tools and techniques to the operations of an organisation.

The third stream views lean as (i) a complete system and (ii) a series of Rapid Improvement Events (RIEs) (Radnor and Osborne, 2013). RIEs refers to “the use of discrete [lean] workshops or events taking place over a concentrated set of time” (Radnor and Osborne, 2013, p. 270). As a complete system, lean is different from RIEs in terms of breadth, depth and regularity (Radnor and Osborne, 2013). While lean as a complete system takes longer to implement if compared to RIEs, RIEs have issues of sustainability (Radnor and Osborne, 2013). Accordingly, organisations that choose lean as a holistic and comprehensive solution tend to choose lean practices as a complete system. However, organisations that seek to gain immediate gains from lean choose RIEs (Radnor and Osborne, 2013).

Regardless of the abstraction level, lean requires the effective involvement of the workforce of an organisation. Without effective people management, changes resulting from employing lean are not sustained. To operationalize lean changes, organisations need to orient their employees to accept these changes without forcing them. The next section delves into the utilisation of HRM practices to support lean practices.

2.2.3.7 The four bundles of lean

The existing literature suggests that lean has four bundles: (i) just-in-time (JIT), (ii) total quality management (TQM), (iii) total preventive maintenance (TPM) and (iv) human resource management (HRM) (Shah and Ward, 2003). It is assumed that an organisation that does not utilise these lean bundles is at a disadvantage when compared to an organisation that utilises all the bundles, as the quotation below summarises it:

“To not implement lean bundles is likely to put plants at a performance disadvantage compared to plants that do implement, regardless of size, age or level of unionization of the plant in question.” (Shah and Ward, 2003, p. 146)
An extensive review of the existing literature enabled Shah and Ward (2003) to bundle twenty-two manufacturing practices into four bundles (see Figure 5). They form a lean system in a manufacturing context (Shah and Ward, 2003).

These practices are the constituent parts of lean manufacturing. They are to be utilised to use lean to improve aspects of an organisation. They ensure the delivery of an intended value to their customers with a consistent high quality. These practices are not only inter-related, consistent and complementary within each bundle but the four bundles are also inter-related, consistent and complementary with each other (Shah and Ward, 2003).

JIT encompasses practices that aim at reducing the flow times within a production system as well as the response times from suppliers (Cua, McKone and Schroeder, 2001). As Canel, Rosen and Anderson (2000, p. 51) state: “Services are much like manufacturing in that both employ processes that add value to the basic inputs used to create the end product.” “It [JIT]
can, therefore, be applied to any process within manufacturing or service operations.” (Canel, Rosen and Anderson, 2000, p. 51)

TQM encompasses practices that instil the ability to continuously improve processes and products aiming at delivering high quality products and services to customers (Aquilani et al., 2017). In a service context, the quality of a service is normally defined by customers’ requirements. However, an organisation has direct responsibility to improve the quality of services regardless of customers’ requirements (Aquilani et al., 2017).

Furthermore, TPM encompasses practices that maintain and improve the integrity and quality of production through the equipment, processes and employees. It is basically to keep all aspects of manufacturing and service operations in top working conditions to avoid delays and breakdowns (Mostafa et al., 2015; Modgil and Sharma, 2016).

The aforementioned bundles have been studied extensively across different sectors of business (e.g., Cua, McKone and Schroeder, 2001; Ahuja and Khamba, 2008; Aquilani et al., 2017). Despite the crucial role the HRM bundle plays in supporting lean practices (Dal Pont, Furlan and Vinelli, 2008), it has been limited to two HRM practices: (i) self-directed work teams and (ii) flexible, cross-functional workforce (Shah and Ward, 2003).

In theory, the HRM bundle ought to encompass all activities that enable an organisation to manage and orient the human element of lean (Sawhney and Chason, 2005). Therefore, the configuration of HRM practices and the interaction of these practices in a bundle significantly contributes to the performance of an organisation when employing lean practices (de Koeijer, Paauwe and Huijsman, 2014).

However, the HRM bundle, as portrayed by Shah and Ward (2003), is a simple representation of a complex phenomenon (i.e. the utilisation of HRM practices to support lean practices). Although it is important to acknowledge that they statistically confirm the relationship of the HRM bundle and lean, reference to the complexity of the relationship in its natural context is lacking. Such an understanding of HRM practices is significantly limited to a manufacturing context.
To recap, a review of the existing literature reveals a crucial link between HRM practices and lean. Yet, the nature and contextual details of that link and the relevance of the ‘HRM bundle’ to lean, specifically, in a service context is significantly under researched. Our understanding of how organisations utilise enabling HRM practices to support lean practices in a service context remains limited. Therefore, the next section reviews the relevant human resource management literature to highlight what we know and to further clarify the research focus of this research inquiry.

2.3 HRM practices and lean service

2.3.1 Defining ‘HR’ and ‘HRM’

‘Human resources’ (or ‘human resource’) (HRM) refers to the combination of knowledge, skills and energy of individuals who form the workforce of an organisation (Boxall and Purcell, 2015). Though, ‘human resources’ also “include our underpinning or dynamic characteristics, including our physical and emotional health, our intellectual capabilities, and our personalities and motivations.” (Boxall and Purcell, 2015, p. 4) Following this line of thinking, in this thesis, ‘human resources’ denotes the combination of knowledge, skills, energy and characteristics that make each of those individuals in the workforce of the case study organisations a human being. These characteristics include physical, emotional, intellectual characteristics and personality (Boxall and Purcell, 2015).

On the other hand, the concept of human resource management (HRM) refers to all management activities that enable an organisation to manage and orient their ‘human resources’ to fulfil organisational goals such as supporting lean practices (Boxall and Purcell, 2015). Hence, HRM is only concerned with the ‘people’ aspect of an organisation (Boxall and Purcell, 2015). However, as Martin (2009) states, the concept of HRM could mean two things:

- a functional department in an organisation that has the custodian responsibility of relevant policies and practices of people management in the organisation.
- the management activities of an organisation aimed at utilising the ‘human resources’ of the organisation for a particular organisational purpose.

As it could be assumed, the adopted definition of HRM in this thesis is the second one. The concept of HRM is therefore inclusive of all the management activities to recruit, manage,
retain and utilise the ‘human resources’ of the case study organisations (see 3.7.4 Case study profile). For that reason, HRM refers to managerial utilisation of the knowledge, skills, efforts, capabilities and desired behaviours of the individual who form the workforce of the case study organisations to support lean practices.

HRM practices, in this context, are the type of activities carried out by the case study organisations (interpretation of HRM policies and programmes) to support lean programmes (Armstrong and Taylor, 2017). They include activities such as resourcing, learning and development, performance and reward management, employee relations and administration of health and safety (Armstrong and Taylor, 2017). Hence, in this thesis, all activities associated with the management of people and their work in an the case study organisations are considered as HRM practices (Boxall and Purcell, 2015).

The existing literature provides several lines of research with regard of enabling HRM practices to support lean practices. The main rationale behind enabling HRM practices is the optimal utilisation of ‘human resources’ to fulfil organisational goals—to support lean, for instance. In the following sub-sections, enabling HRM practices to support lean practices are thoroughly discussed.

### 2.3.2 HRM bundle: bundling and rationale for it

A ‘bundle’ is a collection of things or quantity of material tied or wrapped up together. It could be a set of anything assembled as a unified unit. The constituent elements are always inter-related, consistent and complementary and have a stronger effect as a bundle. Similarly, an ‘HRM bundle’ is a group of inter-related, internally consistent and complementary set of HRM practices (Shah and Ward, 2003). They are a unified unit that addresses a specific organisational need such as to support lean practices. In this thesis, an ‘HRM bundle’ refers to a set of HRM practices that a service organisation utilise to orient their employees to support lean practices (de Koeijer, Paauwe and Huijsman, 2014).

The HRM practices of a bundle are conditioned to be complementary and reinforce each other (Monks and Loughnane, 2006). They ought to work as a system of interrelated and internally consistent set of HRM practices (MacDuffie, 1995). For that reason, consistency,
inter-relatedness, coherence and complementary among HRM practices in a bundle are the core characteristics of an HRM bundle (Bello-Pintado, 2015).

Some scholars suggest that “Lean work organization practices, as a bundle, have a deleterious effect on attitudes and health at work.” (Bouville and Alis, 2014, p. 3016) However, it is unclear which bundles of lean are referred to in that context. On the other hand, other scholars have confirmed that HRM bundle plays an enhancing and enabling role to support lean practices (Dal Pont, Furlan and Vinelli, 2008). So, one explanation for the deleterious effect of lean on employees might be because of the missing HRM bundle to support lean practices when lean is employed by an organisation (de Koeijer, Paauwe and Huijsman, 2014).

The rationale for bundling HRM practices is that a single HRM practice is less effective in isolation (Bello-Pintado, 2015). Scholars suggest that complementary HRM practices in a bundle significantly support lean practices (Pil and MacDuffie, 1996; Power and Sohal, 2000b). Meaning that “HR practices affect performance not individually but as interrelated elements in an internally consistent HR "bundle”” (MacDuffie, 1995, p. 197).

Other scholars also advocate that combing lean practices with enabling HRM practices has the potential to reduce lead time, inventory, boosts productivity and improve quality (Bonavia and Marin-Garcia, 2011). For instance, organisations that train their employees in lean tools and techniques benefit most from lean practices (Bonavia and Marin-Garcia, 2011). However, HRM practices that form an HRM bundle for purpose of supporting lean practices also need to be combined in such a way that enable employees of an organisation to benefit from their optimal abilities (Mostafa et al., 2015). It is expected that employees both get intrinsic and extrinsic motivations from such an HRM bundle (Hiltrop, 1992).

Bundling HRM practices could also increase employers’ knowledge, skills and abilities and motivate them to work in the best interest of lean practices in their organisation (Huemann, Keegan and Turner, 2007). Several scholars add to this understanding by stating that bundling HRM practices enable organisations to be strategically flexible to improve organisational performance (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017).
However, one must not generalise that all HRM practices are behaving as enablers to lean practices. The existing literature only provides consensus among scholars that HRM practices are crucial to support lean practices. It prescribes several HRM practices with potential for that purpose (de Koeijer, Paauwe and Huijsman, 2014). Therefore, one can assume that not all HRM practices are associated with supporting lean practices (Bonavia and Marin-Garcia, 2011).

The existing understanding (e.g., MacDuffie, 1995; Bonavia and Marin-Garcia, 2011; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2013) attempts to bundle ‘what’ HRM practices have the potential to support lean practices. The prevailing problem with this approach of bundling HRM practices, however, is overemphasizing that all organisations utilise the same set of functional HRM practices to support their lean programmes. This approach also fails to appreciate the existing utilisation of HRM practices in an organisation prior to employing lean practices. While it seems our existing understanding of ‘what’ HRM practices to be bundled is developed to some extent, there is a significant ambiguity around ‘how’ and ‘why’ such HRM practices are to be utilised to support lean practices. Scholars are yet to provide a theory to guide bundling HRM practices (Bello-Pintado, 2015). They are still unable to define what constitutes an 'optional' or 'obligatory' bundle of HRM practices (Bello-Pintado, 2015).

This section has so far discussed that lean management always include several HRM practises to succeed (Lorden et al., 2014; Al-Hyari et al., 2016). It is therefore safe to suggest that employing lean relevant HRM practices to support a lean programme differentiates one organisation from another in terms of operational improvements under lean management (Al-Hyari et al., 2016). However, a lean relevant HRM practice is less effective in isolation and outside an HRM bundle in supporting a lean programme: “HRM bundles have significantly larger magnitudes of effects than their constituent individual practices” (Subramony, 2009, p. 745). In general, and also in the context of this thesis, an ‘HRM bundle’ refers to a group of inter-related, internally consistent and complementary set of HRM practices (as a unified unit) to fulfil a specific strategic business need (Shah and Ward, 2003; de Koeijer, Paauwe and Huijsman, 2014). On the other hand, an ‘HRM practice’ is an umbrella label for activities associated with people management and the management of employment relationships in an organisation (Boxall and Purcell, 2015). In other words, HRM practices are the activities that managers conduct in an organisation to implement HRM policies relevant to organisational business strategies (Armstrong and Taylor, 2014).
Moreover, every HRM practice represents a set of behaviour associated with a role that managers assume in supporting business strategies such as employing lean management (Schuler, 1992). These activities include, and can be categorised into, for instance: “resourcing, learning and development, performance and reward management, employee relations and administration.” (Armstrong and Taylor, 2014, p. 10). They are generally associated with leadership, managerial and operational roles that managers assume in organisations to deploy lean management (Schuler, 1992). It is therefore suggested in the literature that “HR practices can be developed to cue and reinforce role performance.” (Schuler, 1992, p. 26). For instance, “a company that has defined a need to improve quality” have “some practices tie role behaviour directly to strategic needs.” (Schuler, 1992, p. 26)

Specific examples of HRM practices within these categories of activities include: absence management, employee performance management, pay and bonus calculation, training and development, recruitment and selection and health and safety (Schuler, 1992; de Koeijer, Paauwe and Huijsman, 2014).

Bundling HRM practices, on the other hand, refers to the act of developing a list of several HRM practices because they are inter-related to support an organisational purpose and then implementing the practices together in order to complement and reinforce each other (Armstrong and Taylor, 2017). Several scholars (e.g., Jiang et al., 2012; Bello-Pintado, 2015) argue that HRM, as a system, is a combination of several bundles of highly integrated set of HRM practices. In a bundle, the enlisted HRM practices are always aligned to achieve the strategic goals of an organisation (Jiang et al., 2012). However, the existing literature also suggests that, in general, bundling only refers to horizontal integration of inter-related HRM practices to support a specific organisational need (Boxall and Purcell, 2015; Armstrong and Taylor, 2017). Therefore, bundling is found on the notion of ‘complementarities’ i.e. horizontal and internal fit of HRM practices (Richardson and Thompson, 1999; Subramony, 2009). Consequently, the argument in favour of bundling HRM practices is simple: “a firm that has bundles of HR practices that most closely fit one or other of the ideal type systems should have a higher level of performance, providing it also achieves high levels of fit with competitive strategy.” (Richardson and Thompson, 1999, p. 11) Further, the literature of strategic human resource management suggests that HRM bundles can serve as the primary unit of analysis to study the impact of HRM on organisational outcomes such as operational
improvements under lean management (Huselid, 1995; MacDuffie, 1995; Bello-Pintado, 2015).

Taken together, there is a lack of consensus about the number, the use of specific HRM practices and their relevance to lean service. There is a noticeable lack of contextual and real-world understanding of proposed enabling HRM practices to support lean practices in the literature, which necessitates the need of the proposed research. The extant literature provides limited understanding of what HRM practices constitute the HRM bundle. It is not therefore surprising that research in this area is still concerned with investigating what HRM practices are needed to support lean service and maintain its practices over periods of time (Sunder, Ganesh and Marathe, 2018). What is empirically confirmed in the literature is that the HRM bundle plays a mediating role in supporting lean practices (Dal Pont, Furlan and Vinelli, 2008).

2.3.3 Managing and directing the human element of lean

Lean is ‘people centred’ and, thus, has to be ‘people-driven’ (Forrester, 1995, p. 22). However, there seems to be a tremendous amount of research to understand the operational aspects of lean; very few scholarly works have attempted to focus on the human side of lean, particularly the HRM practices (Sparrow and Otaye-Ebede, 2014). Research suggests that organisations are rather tactical and reactive when it comes to dealing with the human element of lean (Sparrow and Otaye-Ebede, 2014).

The human element is specifically significant in a context which is often labour intensive. In such a context, employees own the knowledge of service delivery processes and this knowledge is vital to identify and improve delivery processes using lean tools and techniques. It is necessary to acknowledge that the existing literature does not provide consensus among scholars on the course of action for organisations to follow to support their lean programmes (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017).

The current application of lean in organisations usually focus on the tools and techniques of lean; thus, neglecting the human element of lean (Dahlgaard and Dahlgaard-Park, 2006). This means that organisations train their employees on lean tools and techniques and, usually, ignore that enabling HRM practices are to be utilised in order to build a continuous
improvement culture where every employee is part of lean service (Dahlgaard and Dahlgaard-Park, 2006). Ignoring the human element is particularly problematic in the service sector as this element is “an important variable in the services sector.” (Abdi, Shavarini and Seyed Hoseini, 2006, p. 204)

Some scholars have clearly pointed out that organisations frequently wrongly understand lean as a set of tools and techniques and, consequently, fail in motivating and directing their workforce to support lean practices (Spear, 2004). And so, it is no wonder why scholars recently have started to focus on the role of the human element in lean application and stress the appropriate use of such element to support lean practices (Bortolotti, Boscari and Danese, 2015).

Further, the existing literature suggests a positive link between core competency of workforce and the application of lean practices (Shokri, Waring and Nabhani, 2016). Such core competencies include educating the individuals who form the workforce of an organisation and improving their intake of continuous improvement (Shokri, Waring and Nabhani, 2016). The core competencies needed for a successful lean journey is usually summarised in the lean skills, knowledge and behaviour that an organisation would like to obtain from its employees to support lean (Sparrow and Otaye-Ebede, 2014).

For that reason, scholars unanimously agree that lean application does not only mean the tools and techniques of lean; it has to be understood and implemented as a combination of tools and techniques and the proper management of the human element of lean (Yang, Yeh and Yang, 2012; Yang and Yang, 2013). Thus, the existing research argue that the human element of lean is vital to address in order to support lean practices in an organisation (Sawhney and Chason, 2005). Towards that end, previous scholars have suggested to go back to the context in order to understand the enabling HRM practices that organisations utilise to manage their workforce and direct it to support lean programmes throughout lean maturity stages (Sunder, Ganesh and Marathe, 2018).

There are various streams of literature that attempt to look into the human element of lean such as the soft side of lean (Bortolotti, Boscari and Danese, 2015), management control practices (Netland, Schloetzer and Ferdows, 2015), impact of lean on HRM (Carter et al., 2016; Neirotti, 2018) and enabling HRM practices (de Koeijer, Paauwe and Huijsman, 2014).
Regardless of the streams, all the existing literature agree on the importance of the human element in the application of lean (e.g., Sawhney and Chason, 2005; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2013, 2014).

Some scholars justify the importance of the human element of lean by commenting that lean application is knowledge intensive (Drew, McCallum and Roggenhofer, 2004) For that reason, its application is heavily dependent on knowledge and skills of the workforce of an organisation (Drew, McCallum and Roggenhofer, 2004). Considering the work of the other scholars, this explanation is also logical as lean shakes the entire system of an organisation in order to remove any safety nets of waste (Womack, Jones and Roos, 1990). Lean introduces fragility into the systems of service delivery aiming to make these processes more efficient. Consequently, service organisations realise that they need to have a dependable and reliable workforce to support lean practices (Swank, 2003).

Other scholars further justify the importance of managing and directing the human element by stating that lean application requires employees to take ownership of processes (Forza, 1996). Such ownership of service delivery processes requires the workforce of an organisation to be enabled to support lean practices and take ownership of service processes.

Several other scholars suggest that the importance of the human element is because most of the waste in an organisation is due to human behaviour (Sawhney and Chason, 2005). Accordingly, transition to lean requires looking into and manage the human behaviours that create waste. Understanding the human element of lean is therefore significant to investigate any human behaviour that might create waste.

Another line of reasoning is that lean application requires flexibility and involvement of the workforce of an organisation (Biazzo and Panizzolo, 2000). This denotes that actors (employees and managers) who are involved in a service delivery processes ought to be flexible and involved in lean practices to apply lean tools and techniques to improve service delivery process of their responsibility.

Together, the most cited reason for lean failure in organisations is related to managing the human element of lean and direct it to support lean practices (Forrester, 1995; Forza, 1996; Biazzo and Panizzolo, 2000; Sawhney and Chason, 2005). Proper management of the human
element of lean requires dealing with the resistance of employees to lean, promoting employee participation and involvement in lean, training employees in lean knowledge (Liker and Rother, 2011; Pedersen and Huniche, 2011).

So far, the discussion suggests that to direct and to manage the human element of lean, organisations need to utilise HRM practices. Enabling HRM practices provide supportive activities that assist organisations to direct their workforce to support lean practices (Bonavia and Marin-Garcia, 2011). Therefore, some scholars call for further research on enabling HRM practices in order to understand if these practices could also compensate any negative impact of lean on employees that might result during transition to lean (Rees and Gauld, 2017). However, prior to such kind of research, we need to understand enabling HRM practices and how these practices are utilised to support lean practices. There seems to be a general overlooking of the role of the human resource management when transferring lean practices to a service context (Bamber et al., 2014; Thirkell and Ashman, 2014). The review of the literature highlights the need to further understand the human element of lean in order to help organisations to be strategic and proactive in managing and directing such element to support lean practices (Sparrow and Otaye-Ebede, 2014). Research to further explore the soft side of lean practices (i.e. the human element) is essential in the success of lean programmes (Sparrow and Otaye-Ebede, 2014; Shokri, Waring and Nabhani, 2016).

This exploratory inquiry therefore significantly increases our existing understanding around soft lean practices. The existing literature (e.g., Bortolotti, Boscari and Danese, 2015; Hirzel, Leyer and Moormann, 2017; Gaiardelli, Resta and Dotti, 2018) advocates that lean is a complex system of soft and hard practices. The soft lean practices include “small group problem solving, employees’ training to perform multiple tasks, supplier partnerships, customer involvement, and continuous improvement” (Bortolotti, Boscari and Danese, 2015, p. 182). An organisation is generally expected to use a combination of soft and hard lean practices when employing lean to improve its operational performance (Gaiardelli, Resta and Dotti, 2018). However, a consensus does not exist among scholars as to how much of soft or hard lean practices an organisation needs to succeed its lean programme (Hadid and Mansouri, 2014). Empirical results recently indicate that an organisation with a humane orientation in its lean programme (or with a focus on soft lean practices that concern employees and their relationships) outperform an organisation that lacks such a humane
orientation in its lean programme (Bortolotti, Boscari and Danese, 2015; Hadid, Mansouri and Galleear, 2016).

While organisations with successful lean programmes have a humane orientation, further research is also necessary to clarify the existing understanding around what does ‘humane orientated’ entail (Bortolotti, Boscari and Danese, 2015). Although the engagement of the workforce in lean practices is varied widely across organisations, the employees of organisations are the guarantor of the success of lean programmes (Dombrowski, Mielke and Schulze, 2011). However, the success of lean is not the only motive for utilising enabling HRM practices to manage and direct the human element of lean; “Sustaining efficiencies gained from lean-associated process reengineering requires managers to properly manage the human factor of lean implementation.” (Lorden et al., 2014, p. 26) The next section therefore discusses the potential enabling HRM practices to manage and direct the human element of lean from the existing literature.

2.3.4 Enabling HRM practices

Bottom-up approach of lean application in the service sector necessitates the use of enabling HRM practices to manage and orient workforce to support lean practices (de Koeijer, Paauwe and Huijsman, 2014). The existing literature offers several potential functional HRM practices that organisations could employ to orient their ‘human resources’ towards achieving organisational goals. They could have different labels and form different bundles for different organisational purposes (Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2013). However, they all intend to assist an organisation to utilise their ‘human resources’ and direct such resources to support programmes such as lean programmes (Bonavia and Marin-Garcia, 2011). This section further discusses this point by critically reflecting on the existing literature.

When lean is employed, the majority of HRM functions are devolved to line managers; accordingly, the responsibility of people management is heavily devolved to line managers (Gollan, Kalfa and Xu, 2015). The attitude and behaviour of line managers towards their staff members, highly influence the HRM practices employed to support lean practices (Huo, Boxall and Cheung, 2018). Therefore, organisations require to be selective in terms of HRM practice they utilise to support their lean programmes.
On the other hand, employees of an organisation are gradually integrated into lean practices as lean matures (Netland and Ferdows, 2016; V. Wickramasinghe and Wickramasinghe, 2017a). Enabling HRM practices are expected to produce the required changes in employees’ behaviour that support lean practices and allow organisations to integrate them in lean practices (Sparrow and Otaye-Ebede, 2014). One such crucial behaviour is the ‘Continuous Improvement behaviour’ which means employees (are motivated to) make the effort to come up with improvement ideas in their areas of work (Jørgensen, Laugen and Boer, 2007). The extent to which enabling HRM practices are utilised to support lean practices indicates the extent lean practices are adopted and sustained in an organisation (D. Wickramasinghe and Wickramasinghe, 2017). Therefore, it is suggested that organisations need to “Realise that no amount of training in Lean tools and techniques will compensate for the changes required at a behavioural and cultural level” (Atkinson, 2010, p. 36).

For that purpose, lean initiatives require a bundle of enabling HRM practices to succeed (de Koeijer, Paauwe and Huijsman, 2014). Advocates of utilising HRM practices to support operational excellence programmes argue that enabling HRM practices create a learning environment for employees (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017). Such environment is very vital to support lean practices as employees require learning about lean tools and techniques and how they can apply them to service delivery processes of their responsibility.

Whether the purpose of employing enabling HRM practices are 'explorative or exploitive', such practices enable service organisations to be strategically flexible to adapt to changes that are required by lean service (Herzallah, Gutiérrez-Gutiérrez and Munoz Rosas, 2014; Gutierrez-Gutiérrez, Barrales-Molina and Kaynak, 2017). Scholars further argue that organisations who reach the maximum value in their lean programmes are those that support their lean programmes with HRM practices such as training, employee communication, remuneration and employee involvement and employee empowerment (Marín-García et al., 2010). For the purpose, they suggest and prescribe several functional HRM practices that potentially could serve as enabling HRM practices to support lean in various business contexts, mainly manufacturing.
This insight could also translate into the lean maturity stages which could mean that organisations who employ lean practices in the three stages of lean maturity of ‘Beginner’, ‘In Transition’ and ‘Advanced’ use enabling practices such as training, employee communication, remuneration and employee involvement while those at ‘Cutting-edge’ stage utilise employee empowerment along the previous HRM practices (Marín-García et al., 2010; Netland and Ferdows, 2016). In this context, HRM practices encompass all activities that an organisation undertake to manage and direct its human resources to support organisational goals (Wilkinson, Redman and Dundon, 2016). These activities include, for instance, recruiting, hiring, selecting, training, developing, appraising, compensating and dismissing employees (Wilkinson, Redman and Dundon, 2016).

While these practices have the potential to work in isolation, they can also be bundled together for greater effectiveness (de Koeijer, Paauwe and Huijsman, 2014). This explains that not all functional HRM practices contribute equally to employee experience in a context where lean is employed to improve operational performance of an organisation (Bonavia and Marin-Garcia, 2011). For instance, an organisation recently employs lean might freeze recruitment until its existing staff needs are reconsidered using lean tools and techniques (Lindsay et al., 2014). That’s to say, they will be more selective in terms of their workforce (Snell and Dean, 1992). Some scholars have labelled such practice as ‘lean staffing’ by which organisations attempt to reduce labour costs through intensification of work and de-skilling (Carter et al., 2013). It is therefore unclear from the existing literature how practices such as recruitment and selection are utilised to support lean practices.

Some HRM practices, such as training, are strongly advocated in the literature to be utilised to support lean practices. However, they are not effective if they are utilised for the sake of utilising them. For instance, the existing literature warns that enrolling employees in lean related training should not be considered as ‘being nice to people’ or ‘training for training’s sake’ (Atkinson, 2010). Besides, it is unclear what could be considered as lean-relevant training programmes. In such circumstances, even if training is utilised to support lean practices, it is not helpful. Training, in this context, generally, refers to the training hours employees are enrolled in, the skills they are assisted to develop and the creation and use of multifunctional teams and workforce (Sangwa and Sangwan, 2017).
Other HRM practices such as employee involvement is argued to be the central tenant of lean (Vidal, 2007). It is suggested that employee involvement in lean gives employees a positive perception of lean and encourage them to participate in lean practices (Leggat et al., 2018). However, increasing employee involvement in lean practices does not necessarily increase job satisfaction (Arunachalam and Palanichamy, 2017). Therefore, it is unclear how much employment involvement supports lean programmes.

Employee empowerment, on the other hand, is meant to increase responsibilities and abilities of employees to support lean practices (Vidal, 2007). Through this practice, organisations could encourage employees to use their discretionary behaviour in favour of lean practices (Hirzel, Leyer and Moormann, 2017). In this context, employee empowerment, generally, refers to (i) the number of improvement suggestions an employee make and how many of them are implemented, (ii) respect for people, (iii) work-related flexibility and (iv) incentive schemes to encourage employee discretion (Sangwa and Sangwan, 2017). While HRM practices such as employee empowerment are appealing to utilise to support lean programmes, it is unclear how in practice is perceived by employees in a lean context.

It is also suggested that changes result in lean practices and challenges that might face lean application are to be communicated to employees across an organisation (Atkinson, 2010). Therefore, there is a realised need from the existing literature that organisations need to utilise employee communication to support their lean programmes. However, it is unclear how communication channels are utilised for that purpose.

Further, organisations are also encouraged to motivate employees i.e. 'energise people’ to work towards achieving goals and targets designed to support lean practices (Atkinson, 2010). One rationale for this is that dealing effectively with lean practices requires an organisation to have motivated workers (Bonavia and Marin-Garcia, 2011). However, what sort of motivation actually works in a lean context is yet to be understood.

Other scholars advocate that organisations ought to utilise employee health and safety to support their lean programmes (Longoni et al., 2013; Crema and Verbano, 2016). In this context, employee health and safety indicators could include absenteeism rate due to health issues and employee wellbeing and number of incidents happen that jeopardise employee health and safety (Sangwa and Sangwan, 2017). However, one could argue that health and
safety is an organisational concern regardless of lean application. Therefore, it is unclear how does health and safety practices assist organisations with their lean programmes.

Hereafter, a critical reflective summary of a list of potential HRM enablers to support lean management is presented. It is essential however to acknowledge that due to the inductive nature of this research inquiry (see 3.3 Research approach) this literature emerged after the findings. The rationale for this is explained by Eisenhardt, Graebner and Sonenshein (2016) that in an inductive research the focus is to understand the phenomenon of interest in the study through a continuous back and forth movement between data and literature: “the core interest [in an inductive research inquiry] is strong theory—clearer constructs, better understanding of relationships between them, or richer processes—about important phenomena that is grounded by empirical data.” (Eisenhardt, Graebner and Sonenshein, 2016, pp. 1114–1115). The list of the potential HRM enablers is as follows:

**Selectivity in staffing:** Organisations employing lean practices to improve performance are advised to become more selective in their recruitment (Gao and Low, 2015). This could be because they realise they need to recruit candidates with the correct calibre in order to be able to retain them (Taylor, Taylor and McSweeney, 2013). This makes sense because to respond to fast-paced changes that lean requires in early stages of lean maturity, organisations need talent (Hutchison and Boxall, 2014). There is a continuous war for talent among businesses to fulfil the staffing needs of a fast-paced and ambiguous organisational change environment (Hutchison and Boxall, 2014).

However, the existing literature also suggests that selectivity in staffing could also mean recruitment freeze (Lindsay et al., 2014; Gao and Low, 2015). It could therefore be assumed that the use of recruitment and selection to support lean practices probably result in recruitment freeze while organisations asses their existing staffing needs (Lindsay et al., 2014). Some scholars called such practices as lean staffing and argue that staffing is used as a vehicle for lean to reduce labour costs (Carter et al., 2013; Lindsay et al., 2014). For that reason, other scholars have criticised leaner staffing as a means to intensify work for employees when lean is employed by an organisation (Findlay et al., 2017). Accordingly, from the existing literature, it is unclear how organisations utilise recruitment and selection to support lean practices. Do they use it as a vehicle to reduce labour costs and intensify work for employees or as an enabling practice to recruit the required talent for lean service?
Changing role profiles: In practice, employees take on the responsibilities of integrating lean practices in their areas of work (Moyano-Fuentes and Sacrista´n-Díaz, 2012). They go beyond the initial hype of adopting lean practices by their organisations and make or break lean (Sparrow and Otaye-Ebede, 2014). Therefore, supporting lean practices depend on the role employees’ play during lean deployment (Duguay, Landry and Pasin, 1997). For that reason, the existing literature suggests that roles are to be adapted and fluid in order to respond to changing circumstances of lean adaptation (Spear and Bowen, 1999). This change of role profiles extends to various levels of an organisation under lean practices (Power and Sohal, 2000a).

However, the existing literature is unclear as how service organisations use role profiling to support lean practices. There is a call in the literature to further explore the utilisation of role profiling to support lean (Moyano-Fuentes and Sacrista´n-Díaz, 2012). It is therefore vital to understand whether an organisation, employed lean, tailor its existing roles to support lean or create new roles specifically for that purpose.

Work intensification: Work intensification could result from employing lean practices by an organisation (Rees and Gauld, 2017; Neirotti, 2018). One explanation for such a practice is that it might be because organisations attempt to speed up the pace of lean adoption. Another explanation could be that this practice is the result of reviewing untapped talent in an organisation soon after lean is employed. In any case, work intensification, even if it is perceived as a response to speed up lean changes, negatively impacts work and staffing issues (Henderson et al., 2016).

Work intensification could also happen unintentionally due to (i) reduced staffing ratios, (ii) involving employees with skill-mix in a lean project, (iii) changing work shift and workloads and/or (iv) lack of harmonious support from colleagues (Henderson et al., 2016). Other scholars suggest that such a practice results from (i) lack of management support for employees, (ii) increase in overtime hours and/or (iii) lack of cross-training (Angelis et al., 2011). Taken together, employees require the right level of resources (including human resources) to fulfil customer needs (Henderson et al., 2016). Therefore, it is not surprising that work intensification practices are generally viewed by employees as unfair as it might force employees to use their personal time for work purposes (Angelis et al., 2011). On the
contrary, the existing literature suggests that employees be motivated in order to respond to changes in workload on voluntary bases where cross-training is also provided (Spear and Bowen, 1999; Angelis et al., 2011). Therefore, it is interesting to revisit the lean implementation context to further understand this practice in such a context.

**Attendance management:** The existing literature advises that lean could fail when there is a significant level of employee absenteeism at work (Bonavia and Marin-Garcia, 2011). This could result from high level of stress from lean practices or health and safety issues such as injuries, musculoskeletal disorders or ergonomic issues due to employing lean practices (Womack, Armstrong and Liker, 2009). It could also be associated with workplace bullying such as undesired behaviour or attitude from a line manager as part of design and implementation of lean practices (Conti et al., 2006; Magee et al., 2017).

Regardless of the reason of absenteeism, it is vital for organisations to manage attendance of employees to support lean practices. One rationale for this is that high level of absenteeism significantly impact workplace productivity (Magee et al., 2017). However, the existing literature suggests that attendance management is generally perceived as a routine, mundane and ‘box-ticking’ exercise by line managers (Hadjisolomou, 2015). Therefore, it is unclear from the existing literature if absence management contributes to a lean-specific HRM bundle. If it does, it is also unclear how service organisations can utilise this practice to support lean practices.

**Employee retention:** Employee retention is crucial to support lean practices (Sangwa and Sangwan, 2017). The main rationale for this understanding in the existing literature is that high rate of employee turnover negatively impact the continuity of lean programmes (Panizzolo et al., 2012). Organizations could use strategies such reward to retain employees throughout lean maturity stages (Tracey and Flinchbaugh, 2008). They could also follow the footsteps of Toyota Company by withholding the power of ‘hire and fire’ from immediate supervisors and devolve them to the company (Shook, 2010).

Taken together, employee retention practices have the potential to support lean practices because they do not only decrease employee turnover but also increase employee job satisfaction under lean practices (Laureani and Antony, 2010). However, it is unclear from
the existing literature how organisations retain their employees when they employ lean, especially when lean gradually leads to cuts in staff number.

**Training:** Training and development is generally suggested in the existing literature to support lean practices (e.g., Snell and Dean, 1992; Osterman, 1994; MacDuffie, 1995; Marín-García et al., 2010; Leggat et al., 2018). This is not surprising because lean deployment is knowledge-intensive and heavily relies on the skills of the workforce of an organisation (Drew, McCallum and Roggenhofer, 2004). However, as recent research suggests, training and development programmes must follow the sequence of setting training goals, prioritizing those goals and striving for training effectiveness (Sitzmann and Weinhardt, 2018).

Therefore, training and development, in this context, is meant a well-executed package specifically designed to help organisations to have multi-skilled employees for their lean programmes. Such training packages are suggested to equip employees with a variety of skill-sets required to support lean practices (Drew, McCallum and Roggenhofer, 2004). Scholars argue that organisations that invest in training their workers are the ones who get most out of their lean programmes (Martín and García, 2010; Bonavia and Marin-Garcia, 2011).

Several reasons are put forward in the existing literature to support this relationship. One rationale is that employees’ skills and knowledge impact quality of the products of an organisation. Therefore, improvements in employees’ skills and knowledge increase their capability and lead to better quality (Wong, Ignatius and Soh, 2014). Another rationale is that training enables organisations to address people-related issues of lean deployment such as lack of skills (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). Therefore, continuous training programmes foster an appropriate culture to support lean practices in an organisation (Bhamu, Sangwan and Singh Sangwan, 2014; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014). Such continuous programmes not only enable employees to benefit from ongoing training but also allow them to have their skills informed (Cook and Graser, 2001). As a result, gradually, such programmes improve employees’ skills and capability to carry out their work to the best of their abilities (Sangwa and Sangwan, 2017). Besides, employees with developed abilities, skill-set and knowledge can engage in generating new ideas; something labelled in lean as continuous improvement ideas (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017).
While workforce is indispensable in lean programmes, developing workforce plays a vital role in supporting lean practices (Narasimhan, Swink and Kim, 2006; Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). Therefore, progress in deploying lean programmes is dependent on how skills and knowledge of the workforce is upgraded using training and development (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). Upgrading in this context is meant multi-function employees who are multi-skilled and flexible with high levels of skills to work across an organisation (Osterman, 1994; Bonavia and Marin-Garcia, 2011; Dora et al., 2013).

However, utilising training and development to support lean practices is not as straightforward as it might seem so far. For instance, from the perspectives of employees, their experience has been varied (Lindsay et al., 2014). The literature suggests that while employees have reported that they have been enrolled in training and development programmes, there is also the account of those who have complained that they have witnessed fewer opportunities to obtain variety of skills from job rotation across variety of job roles (Lindsay et al., 2014). There also have been reports of deskillin employees rather than upskilling them as part of reform programmes such as lean (Godard, 1998). However, one note of caution here is that, for instance, Godard (1998) when he refers to deskillin of employees he states ‘a sizeable minority of respondents admit’. Therefore, deskillin does not seem to be a general case.

Another issue that has been argued in the literature is that there is a misunderstanding among organisations that training their employees in lean tools and techniques is sufficient to support lean practices (Anand et al., 2009). Training employees is therefore could be argued that it is not a panacea to save lean programmes from people-related issues. Even for training their employees, organizations ought to clarify whether they go for technical multi-tasking or soft skills (Flynn, Schroeder and Sakakibara, 1995). Therefore, they require pondering into questions of whom to train? How to train? When to train? Why to train? (Power and Sohal, 1997).

To sum up, training and development is tremendously being prescribed to be utilised to support lean practices. For that purpose, organisations are suggested to follow a sequence when designing their training packages: (i) setting training goals, (ii) prioritizing training goals and (iii) striving on training usefulness (Sitzmann and Weinhardt, 2018). Further, training and development while enables organisations to train their workforce for cross-
departmental capabilities and multi-skilling, organisations need to actively promote multi-skilling and flexible workforce in order to work (Power and Sohal, 2000b; Taylor, Taylor and McSweeney, 2013). One suggestion in this regard from the existing literature however is to enrol employees in job rotation to expose them to variety of tasks (Angelis et al., 2011). It is therefore interesting to further investigate how in practice training and development is used to support lean practices. Our understanding needs to go beyond the existing established relationships between the concepts of ‘training’ and ‘lean’ and explore how training programmes actually support lean service.

**Employment security:** Earlier scholars (e.g., Bonavia and Marin-Garcia, 2011; de Koeijer, Paauwe and Huijsman, 2014) suggest that job security is a relevant HRM practice to support lean implementation. Bonavia and Marin-Garcia (2011, p. 926) argue that “Staff commitment [to lean] is higher when they are regarded as a valuable resource for the company, rather than an asset to be bought and sold.” One way for an organisation to demonstrate that their staff members are valuable is through employment security (Bonavia and Marin-Garcia, 2011).

Other scholars (e.g., Osterman, 1994) confirm that employment security (in the form of internal promotion) has a direct link with organisational performance. There seems to be a clear justification for that link. The literature suggests that employees perceive investment by their organisation in the long-term of their career development as job security (Ordiz-Fuertes and Fernández-Sánchez, 2003). Such perception encourages employees to get more involved in organisational change programmes such as lean (de Koeijer, Paauwe and Huijsman, 2014).

As a result, employees, when their employment contract offers employment security (Zacharatos et al., 2007), believe that they can develop a career in their organisation. They are therefore more motivated to work for their organisation which affects the organisation performance positively (Bonavia and Marin-Garcia, 2011). Accordingly, it is not surprising that some scholars (e.g., Ordiz-Fuertes and Fernández-Sánchez, 2003) suggest that an organisation that invests on employees’ training and then promotes them through internal promotion system (Osterman, 1994) obtains indirect return on its investment from such practices (Rane, Sunnapwar and Rane, 2016) by appointing a suitable candidate to key roles for lean implementation (Snell and Dean, 1992).
However, taken together, the analysis of the literature suggests two main issues with existing understanding of employment security to support lean implementation. It is unclear what exactly is employment security in the context of lean service? The literature seems to suggest that the utilisation of other HRM practices such as training and development to support the career path of employees is usually perceived as job security by employees (Rane, Sunnapwar and Rane, 2016). Second, it is also unclear from the existing literature whether lean service programmes suffer in the absence of employment security in a context such as the United Kingdom where employees enjoy limited job protection in general (Marinescu, 2009).

**Quality feedback:** The focus of the existing literature in general is on the provision of quality feedback as part of employee performance management in a lean deployment context. For instance, several scholars (e.g., Moyano-Fuentes and Sacrista’n-Dí’az, 2012) suggest that the abundance of quality feedback positively influences workers’ performance in lean programmes. It is therefore safe to assume that performance management to support lean practices is very much about how the performance of an employee is further improved through feedback rather than using performance management as a vehicle to punish employees for underperformance. This understanding is also confirmed by recent research (e.g., Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017) in which they highlight the advantage of abundance of quality and relevant feedback to better employees’ performance in lean production.

However, it is unclear what a ‘quality feedback’ is to support lean practices. One explanation for such a concept could mean a careful documentation of procedures and allowing employees to perform a variety of tasks when carrying out such documented procedures (Forza, 1996). Further, the existing literature also suggests that performance management when linked to pay for performance is irrelevant or ineffective to support lean practices (Bonavia and Marin-Garcia, 2011).

While it is necessary to acknowledge this insight from the literature, other scholars, contrary to Bonavia and Marin-Garcia (2011), have suggested that pay for performance could be utilised to support lean practices (MacDuffie, 1995). Therefore, one thing we can be sure about from the literature is that organisations heavily depend on quality feedback to direct employees’ and their supervisors to support lean practices (Forza, 1996). However, it is
necessary to go back to lean context to further explore the utilisation of this practices to support lean practices.

**Contingent remuneration:** Pay and contingent remuneration, in this context, is referred to as a remuneration system of salary, rewards, awards, bonuses and any other forms of pay through which employees are recognised for lean desired behaviours and/or outcomes and encouraged to repeat such behaviours and outcomes (Bonavia and Marin-Garcia, 2011; Sangwa and Sangwan, 2017). Scholars (e.g., Marin-Garcia and Bonavia, 2015) suggest that ‘contingent remuneration’ improves employee involvement in lean practices. So, we can assume that one of the benefits of pay and contingent remuneration is that organisations could operationalize employee involvement in lean practices through a lean-tailored pay system (Marin-Garcia and Bonavia, 2015). Other scholars (e.g., Osterman, 1994) have referred to such a tailored pay system as ‘innovative pay systems’.

The exiting literature is thought-provoking when it comes to utilising pay and contingent remuneration to improve employee performance to support lean practices. One stream of thinking (e.g., Wickramasinghe and Wickramasinghe, 2016) suggests that variable pay schemes, which are linked to evaluation-based performance, significantly improve employee performance. It is therefore one can assume that organisations could utilise pay for performance to manage and direct employee performance to support lean practices in a lean context—especially when performance is evaluation-based. However, the second stream of thinking (e.g., Bonavia and Marin-Garcia, 2011; Marin-Garcia and Bonavia, 2015) argues that contingent remuneration systems, where pay is linked to performance, is irrelevant to support lean practices. Hence, it is advised that monetary rewards are least important to support lean practices (Laureani and Antony, 2010; Netland, Schloetzer and Ferdows, 2015). One rationale for this stream of thinking is that organisations who employ lean tools and techniques pay their employees for their abilities in general rather than for the number of tasks they carry out as part of a lean project or to support lean practices (Duguay, Landry and Pasin, 1997). Therefore, taken together, it is interesting to go back to the context of lean deployment to understand which side of the argument reflects such a context.

**Employee voice:** In its simplest form, and in the context of lean, employee voice could mean a mechanism to capture improvement suggestion ideas of employees about workplace improvements (Leggat *et al.*, 2018). It acts as an umbrella for activities that organisations
conduct to direct employees’ improvement suggestions to support lean practices. It is suggested by recent research that employee voice has three elements: (i) a change that employee voice pushes to initiate, (ii) resources devoted to make that change happen and (iii) the interdependencies involve in making the change (Burris, Rockmann and Kimmons, 2017). This explains why considering employee voice could significantly improve employee engagement in operational excellence programmes such as lean (Wilkinson, Dundon and Marchington, 2013). The existing literature suggests that employees be inspired and instructed to ascertain their continuous improvement suggestion ideas to improve their workplace and support lean practices in their organisation (Taylor, Taylor and McSweeney, 2013). However, any organisational attempt to capture employee voice for that purpose, whether it is in the form of a formalised scheme or not, is less effective if employees’ improvement suggestion ideas are seriously not taken on board by organisations (Forza, 1996; Taylor, Taylor and McSweeney, 2013). It is therefore vital to go back to context of lean deployment to understand how much of employee voice is utilised by organisations to support lean practices.

**Self-directed work teams:** Teamworking is usually considered an HRM practice under the umbrella of Toyota way style of human resource management (Gao and Low, 2015). There is a clear explanation why scholars think this way. Lean, to work, requires teams of workers to work together to improve operational aspects of their organisation (Anand et al., 2009). However, one might ask what does that ‘teamworking’ mean in lean context? Shah and Ward (2003) suggest that teamworking simply mean ‘self-directed work teams’. The key element therefore is ‘self-directed’. It is not surprising then that such teams are instrumental in driving continuous improvement processes. They are therefore understood to be a popular element of operational excellent programmes (Netland, Schloetzer and Ferdows, 2015).

These teams of workers play the role of specialists and their work is aligned with lean implementation strategies of their organisation (O’Reilly, Healy and O’Dubhghaill, 2018). The literature suggests that people with enthusiasm for continuous improvement form these teams of lean experts (O’Reilly, Healy and O’Dubhghaill, 2018). The members are usually trained in specialised lean training modules such as Master Black Belts (Bendell, 2006). They actively support lean deployment and are generally involved in problem solving, converting employees’ CI ideas, provide quality feedback on lean deployment, document standardisation
of procedures and enable employees to perform a variety of tasks relevant to lean in their work place (Forza, 1996).

The rationale for teamworking is that it is not only produces a rich pool of ideas and encourages team members to exchange ideas but also enables team members to develop their ideas (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017). Therefore, teamworking improves communication among employees and breaks down silos and communication barriers in order information is exchanged more smoothly (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017). One implication of this, however, is that such teams usually have narrow span of control (Ingvaldsen and Benders, 2016). Some scholars (e.g., Neirotti, 2018) suggest that a supportive teamworking reduces the intensification of work pace when employees are involved in lean implementation. Taken together, teamworking is suggested to support lean. However, it is unclear from the literature what exactly happens to teamworking practices prior to lean deployment in order for this practice to support lean.

**Employee communication:** Scholars (e.g., Atkinson, 2010; Marín-García *et al.*, 2010; Leggat *et al.*, 2018) suggest that to support lean practices, an organisation need an enhanced communication system. In this context, communication refers to engagement in activities from which employees (and their managers) attend to and engage with issues and initiatives of lean deployment in their organisation (Ocasio, Laamanen and Vaara, 2018).

It is therefore not surprising that several scholars (e.g., Lorden *et al.*, 2014; Marín-García and Bonavia, 2015) not only suggest a significant relationship between lean deployment and communication but also advocate that a two-way timely communication between employees and their managers positively contributes to a successful lean implementation. So, to support lean, a ‘structured information and communication’ is vital to bring employees on board with lean implementation (Dombrowski, Mielke and Schulze, 2011). Such a structured communication not only increases employees’ participation in lean deployment but also keeps them aware of the standards of performance set under lean (Angelis *et al.*, 2011). The existing literature also suggests that communication in a lean context is expected to be open and direct (Power and Sohal, 2000a).

However, from the existing literature, it is unclear how exactly organisations utilise employee communication to support lean service? How does communication help employees to stay
aware of lean implementation in their organisation? Does communication only happen through some specific channels to support lean service? These questions necessitate returning to context to clearly understand the vitality of employee communication to support lean service.

**Employee motivation:** In this context, employee motivation is meant organisational support for employees (Gao and Low, 2015). Scholars’ intake of this practice to support lean practices could be summarised as using salary, rewards, awards and any other remuneration schemes to recognise employees for lean desired behaviours (and in order to motivate them to repeat such desired behaviours) (Bonavia and Marin-Garcia, 2011; Sangwa and Sangwan, 2017).

However, there is also another stream of thinking from the existing literature (e.g., de Treville and Antonakis, 2006) that states lean practices should provide a source of intrinsic motivation for employees in their work. This stream of thinking suggests that how an organisation configures its lean practices could be utilised to motivate its employees (de Treville and Antonakis, 2006).

Although scholars suggest that employee motivation highly contributed to people management at Toyota Company throughout its lean maturity stages (Gao and Low, 2015), it is unclear from the existing literature how exactly this practice can be utilised by organisations to support their lean programmes. What we can assume from the existing literature is that this practice was linked to the success of Toyota Production Systems (TPS) (Gao and Low, 2015). It is also recently reported by some scholars (e.g., Netland, Schloetzer and Ferdows, 2015) that only non-financial rewards positively relate to extensive deployment of lean programmes. Therefore, it is vital to go back to context and further understand the utilisation of this practice to support lean practices.

**Employee involvement:** Several scholars (e.g., Biazzo and Panizzolo, 2000; Sawhney and Chason, 2005) suggest that lean implementation requires active employee involvement. Their argument is that if lean is people-centric (Forrester, 1995), employees are the actors who impede or foster lean implementation. Therefore, a positive relationship between employee involvement and lean is usually portrayed in the literature (Longoni and Cagliano, 2015; Holland, Cooper and Sheehan, 2017). It is therefore not surprising that organisations that
deploy lean principles are generally expected to employ a participative management style (Power and Sohal, 2000a). It is also argued that engaging employees in lean implementation improves their morale and faith in lean (Liker and Hoseus, 2010).

However, it is unclear from the existing literature what exactly meant by employee involvement in a lean context. Some scholars (e.g., Marin-Garcia and Bonavia, 2015) attach the four practices of empowerment, training, remuneration and communication to employee involvement. Other scholars suggest that employee involvement is to encourage employees to get involved in problem solving (Taylor, Taylor and McSweeney, 2013) or improvement projects (Angelis et al., 2011). What is certain is that employee involvement is generally prescribed in the literature to support lean implementation (Shook, 2010; Dombrowski, Mielke and Schulze, 2011).

One valid question for organisations when they deploy lean is ‘how best to involve employees?’ (Power and Sohal, 1997) Recent research (e.g., Neirotti, 2018) also suggests that when lean deployment leads to work intensification, employees are less likely to voluntarily get involved in lean implementation. Although the existing literature suggests that management needs to provide a supportive teamworking environment to compensate for that, it is unclear how much such a practice helps.

Expansion of autonomy and empowerment: The existing literature (e.g., Leggat et al., 2018) suggests a bottom-up approach to lean implementation. Scholars (e.g., Vidal, 2007) justify such an approach to increase employee job satisfaction. One possible explanation for this understanding is that such an arrangement equips employees with the skills and ability to analyse root cause of problems when deploying lean tools and techniques in their workplace. Other scholars (e.g., Forza, 1996) also argue that employee empowerment increases the feeling of ownership among employees and therefore encourages them to willingly work to support lean.

The existing literature also suggests that a statistically significant relationship is confirmed between employee empowerment and lean management (Marin-Garcia and Bonavia, 2015). This simply could be interpreted that organisations devolve responsibility of workplace improvement to employees (Taylor, Taylor and McSweeney, 2013). This way employees not only perform a variety of tasks related to lean (Forza, 1996) but also are able to inspect the...
quality of their work (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017). Handing over the responsibility of quality inspection to employees is believed to encourage them to fix errors that might lead to inferior quality (Cook and Graser, 2001).

Hence, scholars (e.g., Forrester, 1995) argue that since lean is people-centric, it must be driven by people. While this approach is perceived to enable employees to identify ways to improve their workplace or quality of their work, it also allows them to make mistakes and learn from their mistakes (Flynn, Schroeder and Sakakibara, 1995). This practice therefore allows employees to exercise creativity in troubleshooting quality issues (Angelis et al., 2011). However, it is necessary to acknowledge that employee empowerment is prescribed to work well with a ‘blame-free’ culture (Angelis et al., 2011).

This previous scholarly understanding, in general, suggests that employee empowerment significantly supports lean implementation and improve organisational performance under lean (Bamber et al., 2014). Recent research (e.g., Hirzel, Leyer and Moormann, 2017) also suggests that employee empowerment increases the number of continuous improvement ideas per employees. This practice enables employees to better utilise their skills and seek more resources from their organisation for that purpose.

However, one can assume that employee empowerment does not seem to be effective in organisational cultures where softer aspects are not well integrated into lean implementation (Bortolotti, Boscari and Danese, 2015; Holmemo, Rolfsen and Ingvaldsen, 2018). Further, one can also deduce that scholars have continuously attempted to showcase the benefits of employee empowerment to support lean rather than how such a practice is utilised for that purpose. Consequently, in the absence of a proper understanding of how such an HRM practice is used to support lean service; even if organisations appreciate the benefits, there is no guarantee that they will reap the benefits. It is therefore necessary to go back to the context and further explore the utilisation of this practice to support lean service.

**Employee health and safety:** Employee health and safety, significant to maintain a healthy workforce, has the potential to be utilised to internalize lean practices. This insight is supported by the existing literature that increased injury rates, ergonomic issues, musculoskeletal disorder are not only suggesting lack of managerial competence and support but also negatively impact the health and safety of employees (Womack, Armstrong and
Liker, 2009; Angelis et al., 2011). It is therefore safe to say that if lean is ‘badly’ implemented; it has detrimental effects on employees’ health and safety and, thus, gradually, on their working lives (Carter et al., 2011; Langstrand and Drotz, 2016). Accordingly, lean practices could bring a stressful environment to employees.

Some scholars (e.g., Bouville and Alis, 2014) discuss undesirable consequences of several lean practices such as delegation of responsibilities, problem-solving requests, standardization, job rotation on employees’ health and safety at work. While lean practices could bring stress to employees due to its design and implementation, another stream of research (e.g., Conti et al., 2006; Schwarz et al., 2017) suggests that lean tools enable an organisation to increase level of employee awareness of health and safety issues at work. This insight is significant because it suggests that lean tools allow an organisation to better plan employee workload to avoid health and safety issues.

It is also necessary to acknowledge that scholars (e.g., Conti et al., 2006) suggest that lean is not fundamentally stressful. The stress, which might accompany lean deployment in an organisation, is usually the result of management decisions in designing and operating lean programmes (Conti et al., 2006). Hence, line managers’ attitude and behaviour throughout lean maturity stages (Netland and Ferdows, 2016) significantly impact employees’ health and safety and, gradually, their wellbeing. Therefore, line managers’ attitude, behaviour and take of lean decide whether lean is negatively or positively impacting the health and safety of their workforce. For that reason, employing lean practices should aim at designs that emphasize the elimination of ergonomic difficulties and provide suitable tools to employees (Angelis et al., 2011).

Further, recent research by Benders, Bleijerveld and Schouteten (2017) suggests that continuous improvement significantly improves the life of nurses by streamlining service delivery processes. Such improvement has also resulted in the improvement of quality of care for patients (Benders, Bleijerveld and Schouteten, 2017). We can explain this improvement by arguing that “Managers of successful lean implementations have well-developed shared vision and implementation plans that are adaptive to workforce stress arising from management’s drive toward the efficient delivery of healthcare” (Lorden et al., 2014, p. 26).
However, these insights, although significant, do not clarify if organisations can utilise employee health and safety to direct employees to support lean practices. Besides, while the wellbeing of employees is significant for the deployment of lean, similar understanding is also necessary for the wellbeing of managers throughout lean maturity stages. Therefore, the wellbeing of managers, especially front-line managers, is also critical to support lean practices (Huo, Boxall and Cheung, 2018). It is therefore necessary to go back to real-world context of lean deployment to further explore how does employee health and safety is actually utilised to support lean programmes.

The aforementioned list is the potential HRM enablers to support lean management from the existing literature. Due to the inductive nature of this research inquiry, this literature emerged after the findings. It is therefore can be assumed that every lean programme, regardless of a business context, includes some sort of HRM practices (Martin, 2017). These practices, as a bundle, mediate the relationship of lean and organisational performance. Organisations that use HRM practices to support their lean programmes are considered as ‘successful’ organisations in terms of employing and sustaining lean practices (Bortolotti, Boscari and Danese, 2015). One explanation for this insight is that utilising HRM practices to support lean practices gives employees a positive perception of their role in lean service (Leggat et al., 2018). Therefore, HRM practices significantly explain the differences in performance of two organisations who have employed lean service (Martin, 2017). The next section further discusses the mediating role of HRM practices in supporting lean.

2.3.5 Mediating role of HRM practices

“It’s hard to build a service powered by artificial intelligence. So hard, in fact, that some startups have worked out it’s cheaper and easier to get humans to behave like robots than it is to get machines to behave like humans.” (Solon, 2018)

It is true that the quote refers to ‘artificial intelligence’. However, it highlights the significance of the ‘human element’ in service creation and management. ‘Humans’ (i.e. the workforce of a service organisation) is the cornerstone of a successful service delivery experience. Therefore, it is easier for service managers to understand how to orient their employees to support lean service than to teach robots to behave like humans for that purpose.
The human resources of an organisation from the perspective of resource-based school are rare, inimitable and non-substitutable valuable resources that give advantage to one organisation over another (Barney, 1991). For that reason, they are strategic resources to assist and enable organisations to achieve their competitive advantage when employing operational excellence programmes such as lean (Huselid, 1995). These resources however require the utilisation of HRM practices to manage and direct when deploying lean practices (Sunder, Ganesh and Marathe, 2018). Accordingly, HRM practices play a mediating and enabling role when lean is employed and they assist an organisation to manage and direct its workforce to support lean practices (Dal Pont, Furlan and Vinelli, 2008).

Workforce management to support lean practices requires a unique attention (Biazzo and Panizzolo, 2000; Parks, 2003). This unique attention gives HRM practices a vital role in supporting lean service (Xiu et al., 2017). Scholars suggest that to understand the mediating and enabling role of HRM practices, we need to research it from the inside of organisations (Biazzo and Panizzolo, 2000; Parks, 2003).

Recent research suggests that organisations with 'better' HRM practices are more ready to deploy and sustain lean practices (Garza-Reyes et al., 2017). While ‘better’ in this context is difficult to define, it could be assumed to mean 'enabling' HRM practices. This is mainly because scholars have referred to HRM practices that organisations utilise to support lean as enabling HRM practices (de Koeijer, Paauwe and Huijsman, 2014). However, despite such crucial role that HRM practices play in mediating the deployment, implementation and sustainability of lean practices, research suggests that HRM practices are not so much utilised in practice for that purpose (Yang, Yeh and Yang, 2012; Negrão, Filho and Marodin, 2017).

Recent research (e.g., Xiu et al., 2017; Galeazzo and Furlan, 2018) support the mediating role of HRM practices in operational excellence programmes such as lean service. There seems to be a strong relationship between HRM practices and how flexible an organisation is in terms of change (Xiu et al., 2017). HRM practices not only help organisations with their change programmes but also help employees to become more productive (Xiu et al., 2017). For that reason, some scholars suggest that practitioners do have to consider HRM practices when assisting their organisation to be more flexible in face of change (Xiu et al., 2017). It can therefore be assumed that HRM practices play a crucial mediating role in fulfilling organisational change programmes whether such programmes increase flexibility of an
organisation or increase their performance through operational excellence programmes such as lean (Xiu et al., 2017).

Further, in the existing literature, a positive link between utilising HRM practices and organisational performance has also been supported (Huselid, 1995; Delaney and Huselid, 1996; Dal Pont, Furlan and Vinelli, 2008). That's to mean HRM practices influence organisational performance whether an organisation has implemented lean or any other operational excellence programmes (Xiu et al., 2017). By the same token, lean service, as a means to improve organisational performance, also requires service organisations to be flexible (LaGanga, 2011). Therefore, such insight is vital that HRM practices have the potential to give an organisation the flexibility required for lean service.

It is now well established from a variety of studies (e.g., Dal Pont, Furlan and Vinelli, 2008; Furlan, Vinelli and Dal Pont, 2011; Galeazzo and Furlan, 2018) that HRM practices are significant in facilitating the complementarity among lean bundles of JIT and TQM. In analysing the role of HRM practices in lean manufacturing, several lines of evidence suggest that HRM practices are necessary to strengthen and intensify the working of JIT and TQM to bring operational performance improvements for an organisation (Furlan, Vinelli and Dal Pont, 2011). Consequently, such mediating role of HRM practices is found to possibly impact the application of lean in any organisation (de Koeijer, Paauwe and Huijsman, 2014). However, it is necessary to note that other scholars suggest that lean and operational performance practices of an organisation also mediate the relationship of HRM practices and organisational performance (V. Wickramasinghe and Wickramasinghe, 2017b).

Whether HRM practices play a mediating role between lean bundles of JIT and TQM or lean bundles play a mediating role between HRM practices and firm performance, the key point in this discussion is that HRM practices play a crucial role in the deployment, application, implementation and sustainability of lean practices in an organisation. And so, HRM practices are an integral part of the strategy of an organisation (Kane, 2000). Such strategy generally provides an organisation with the short-run and long-run direction towards operational performance improvement. Accordingly, lean service, while assists an organisation with improving its service delivery processes in the short run and their performance in the longer run, requires HRM practices to be on board for lean strategies to work.
Further, the indirect impact of HRM practices on firm performance is normally enhanced when a bundle of HRM practices are utilised and an organisation benefit from the synergy among the practices in the bundle (Arthur, 1994; Combs et al., 2006). This could be interpreted as that for HRM practices to play a mediating and enabling role in supporting lean practices, they ought to work as a bundle to create a synergistic effect to support lean practices (MacDuffie, 1995). Such synergistic effect is found to improve productivity and quality of plants (MacDuffie, 1995). It contributes to the construction, institutionalisation and maintenance of lean programmes (V. Wickramasinghe and Wickramasinghe, 2017b).

From the perspective of employees, scholars suggest that employees reflect on their experience of lean practices as favourable when they are exposed to HRM practices such as multi-skilling, team working, involvement (Womack and Jones, 1996; V. Wickramasinghe and Wickramasinghe, 2017b). As a result, we can assume that utilising HRM practices also improves employee experience of lean service. The mediating and enabling role of HRM practices could be explained by how much HRM practices improve employee experience of lean favourably.

Other scholars also suggest that enabling HRM practices support lean practices because these practices foster employee wellbeing (de Koeijer, Paauwe and Huijsman, 2014). In this context, employee wellbeing is meant employee happiness and health and a trusting relationship between employees and their line managers (de Koeijer, Paauwe and Huijsman, 2014). Therefore, the mediating role of HRM practices to support lean could also be about improving the wellbeing of employee. Employees with positive experience of lean practices are then assumed that they take part in supporting lean practices. Such assumptions make sense as scholars suggest that enabling HRM practices decrease employees voluntary turnover and increase their satisfaction in the context of lean (Laureani and Antony, 2010).

And so, when scholars suggest that HRM practices provide the ground on which lean is deployed, supported and sustained; these understandings could mean that HRM practices improve the experience of employees of lean (Laureani and Antony, 2010; Furlan, Vinelli and Dal Pont, 2011). This is also in line with the various calls in the literature that core HRM practices and operations management need to be integrated for greater benefit when lean is employed by an organisation (De Menezes, Wood and Gelade, 2010).
Consequently, the HRM practices that form a bundle of enabling HRM practices have the potential to be exploited and utilised by organisations to support lean (Jørgensen and Matthiesen, 2007). However, one might not assume that enabling HRM practices play such enabling and mediating role in isolation and individually. They are to be bundled specifically to support lean practices (Jørgensen and Matthiesen, 2007). So, HRM practices are 'extremely' vital to support lean practices by improving employee experience of lean practices when they are bundled (Forrester, 1995; Cook and Graser, 2001).

In view of that, organisations can unlock the full potential of their human resources using enabling HRM practices to support their operational excellence programmes such as lean (Power and Sohal, 2000b). One possible explanation for this insight is that one main issue organisations face when employing operational excellence programmes such as lean is their ability to maximise the potential of their existing human resources to support lean (Power and Sohal, 2000b). For that reason, they can utilise HRM practices to not only assist them to unlock the full potential of their workforce to support lean practices but also to sustain such programmes (Power and Sohal, 2000b).

Taken together, these studies (e.g., Snell and Dean, 1992; Sparrow and Otaye-Ebede, 2014; Thirkell and Ashman, 2014) indicate that an organisation employing lean practices fail to sustain changes if such initiatives are not supported by complementary HRM practises. Such support of HRM practices is meant to come from a complementary set of HRM practices (Monks and Loughnane, 2006). Therefore, a lean-specific bundle of HRM practices not only mediates the relationship of lean and organisational performance but also enables lean initiates to produce intended changes from lean programmes and sustain them.

By now, we understand that HRM practices are vital to be employed by organisations to support their lean programmes. This explains why some scholars have labelled HRM practices as an infrastructural pillar of employing operational excellence programmes such as lean (Ahmad, Schroeder and Sinha, 2003). HRM practices, while they mediate the relationship of organisational performance and lean, can be exploited for superior performance and attainment from lean (Jørgensen and Matthiesen, 2007). Thus, they are considered to be the decisive element in deployment and sustainability of lean programmes (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017).
The management of human resources and how such resources are directed to support lean practices are key determinants of the level lean service is adopted. This insight not only proved by research but also logically sound as people of an organisation decide the destiny of lean programmes (Sparrow, Hird and Cooper, 2014). Towards that end, consequently, HRM practices not only work as antecedents to lean service but significantly and positively influence the operational performance of an organisation (Ahmad, Schroeder and Sinha, 2003).

While lean service influences employees’ job content and quality of work; employing HRM practices enable organisations to manage such influence of lean via bringing employees on board to support lean service (Tortorella, Vergara and Ferreira, 2017). Scholars also suggest that managers are to be devolved the necessary HRM practices to ensure that relevant practices are enacted to support lean practices (Gollan, Kalfa and Xu, 2015). Managers oversee lean implementation and their use of HRM practices further employs the mediating role of these practices for the benefit of lean programmes.

However, one also needs to note that while HRM practices play an enhancing role to support lean practices, some scholars suggest that there is no evidence to suggest that they lead an organisation to a greater degree of lean adoption (V. Wickramasinghe and Wickramasinghe, 2017b). Research also suggests that organisations generally make decisions about business strategies whether in long-run or short-run without much thought of HRM practices (Sparrow and Otaye-Ebede, 2014). One rationale for this might be because HRM practices do not directly influence the performance of an organisation (Delery and Gupta, 2016).

Moreover, the existing literature also does not provide a one-combination of HRM practices that could play such mediating role to support lean practices. It is rather left open as different combinations of HRM practices potentially server different organisational purposes (Becker and Huselid, 2010). It is therefore one can assume that a combination of HRM practices that mediates the relationship of lean and organisational performance is different than any other combination of HRM practices that mediate other types of relationships in an organisation.
2.4 Research focus

2.4.1 Research gaps and research question

As recent evidence suggests, lean service is not a mere application of lean tools and techniques (Sparrow, Hird and Cooper, 2014; Bortolotti, Boscari and Danese, 2015). Effective involvement and support of the workforce of service organisations is required to deploy lean programmes (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). This section aims to highlight the gap in our existing understanding around using HRM practices to support lean service based on the review of existing literature in the above-mentioned section.

Service organisations generally employ lean methodology to improve their service delivery processes (Piercy and Rich, 2009). Such improvements eliminate waste and create value for customers (Bowen and Youngdahl, 1998). For that reason, they ought to endorse new working methods, practises and employee behavioural patterns (V. Wickramasinghe and Wickramasinghe, 2017b). Hence, they need to utilise HRM practices to orient their employees towards lean practices and improve their buy-in to lean ways of working (Abdi, Shavarini and Seyed Hoseini, 2006).

However, one of the most important current discussions in this area is that despite the crucial role of HRM practices to support lean service, our understanding of how service organisations utilise such practices is outstandingly limited (Sunder, Ganesh and Marathe, 2018). One major issue is that there is a significant ambiguity around the HRM practices that service organisations utilise to enable their workforce to support it. There is a lack of consensus about the number, the use of specific HRM practices and their relevance to lean service. There is also a lack of contextual and real-world understanding of proposed HRM practices to support lean practices.

This review portrays that utilising HRM practices to support lean service is not only of theoretical importance but also a practical one. What we know from the existing literature with regard of utilising HRM practices to support lean is unable to explain how and why HRM practices are used to support lean service. Following the line of thinking of Boer et al. (2015), therefore, we need to explore this area to obtain new observational ‘facts’.
For that several scholarly reasons (and to address this gap in the literature), this study identifies the enabling HRM practices from the ‘real world’ context and, based on this, develops an ‘HRM bundle’, disentangling it from the four lean bundles originally proposed by Shah and Ward (2003). In doing so, it develops an in-depth understanding of ‘how’ and ‘why’ service organisations utilise enabling HRM practices to support lean practices in its natural context in the real-world.

The main research question is: How, in practice, do service organisations engage with HRM practices to support lean service? This question is, then, divided into four sub-questions:

- How do service organisations view the relevance of HRM practices to lean service? (The first sub-question is mainly answered in 4.3 and 6.3)
- What HRM practices do service organisations utilise to orient their employees to support lean practices? (The second sub-question is mainly answered in 4.3 and 6.3)
- How do service organisations use enabling HRM practices to support lean service? (The third sub-question is mainly answered in 4.3.1–4.3.18 and 6.3)
- Why do service organisations use enabling HRM practices to support their lean programmes? (The fourth sub-question is mainly answered in 4.4 and 6.3)

Taken together, therefore, this study attempts to thoroughly understand how service organisations utilise enabling HRM practices to support their lean programmes. It attempts to answer how relevant is enabling HRM practices to lean service and what are these practices. It also attempts to answer how and why these practices are utilised to support lean service. It sets out to answer the various calls from the existing literature that request further exploration of the HRM-lean relationship. In doing so, it aims to advance our understanding of HR-enabled lean service by elaborating, refining and extending the existing theoretical understanding.

As the research questions are exploratory questions. They require contextual and real-world data to be answered. Accordingly, this study intends to use qualitative data and adopt a multi-case study strategy to obtain the data. This is further explained in detail and justified in chapter three of this study (see Chapter 3: Research design).
2.4.2 Reflections on literature review

Several scholars have suggested that HRM bundle—a combination of interrelated HRM practices—serves as one of the most important bundles of lean (Shah and Ward, 2003; Dal Pont, Furlan and Vinelli, 2008). The rationale for this is that the other lean bundles of TQM, JIT and TPM, together, share the HRM bundle (Cua, McKone and Schroeder, 2001; Shah and Ward, 2003; Galeazzo and Furlan, 2018). Consequently, once, we understand lean-specific HRM practices, what is left from the other three bundles of lean are merely tools and techniques (Cua, McKone and Schroeder, 2001).

Other scholars have also advocated that considering enabling HRM practices to support lean practices not only makes lean a success journey but also gives an organisation a humane orientation in their lean programme (Bouville and Alis, 2014; Bortolotti, Boscari and Danese, 2015). Apparently, organisations with extensive utilisation of enabling HRM practices are more successful in terms of their lean programmes (Bortolotti, Boscari and Danese, 2015). This is because enabling HRM practices, such as training and development, benefit the organisation and its employees to internalise lean practices in service delivery processes (Bouville and Alis, 2014).

For that reason, it could be suggested that service organisations that could make the most out of their lean programmes are the ones who adopt enabling HRM practices (Osterman, 1994; Bonavia and Marin-Garcia, 2011). Such integration of enabling HRM practices with lean service significantly enable them to realise the benefits associated with lean service (Liker and Hoseus, 2010; Yang and Yang, 2013). The rationale for this is clear. It is because HRM practices provide the ground on which lean service is operating (Furlan, Vinelli and Dal Pont, 2011).

Several other scholars, therefore, suggest that utilising enabling HRM practices enhances the direct and positive effect of lean tools and techniques on operational performance of an organisation (Dal Pont, Furlan and Vinelli, 2008). As a result, only organisations that utilise enabling HRM practices to support lean practices benefit from the synergy of lean bundles of TQM and JIT (Furlan, Vinelli and Dal Pont, 2011). Accordingly, it could be assumed that enabling HRM practices indirectly affect the performance of an organisation when deploying lean practices (Gollan, Kalfa and Xu, 2015).
As a result, enabling HRM practices are crucial to understand because they enable service organisations to improve employees’ behaviour to support lean practices (Jørgensen, Laugen and Boer, 2007). Such improvement of behaviour is necessary as employees have to conduct activities that support lean service such as continuous improvement behaviours or lean projects (Jørgensen, Laugen and Boer, 2007) to get involved in lean deployment in their area of work (Shah and Ward, 2007).

In view of that, some scholars have also suggested that organisations could exploit enabling HRM practices in the form of a bundle to support their lean programmes (Jørgensen and Matthiesen, 2007; Jørgensen et al., 2007). These scholars agree that the only way to create desired behaviour and outcomes to support lean in employees is through enabling HRM practices (Sparrow and Otaye-Ebede, 2014).

However, other scholars avoid the concept of exploitation of HRM practices by suggesting that utilising HRM practices to support lean creates mutual gains for employees and their organisations (de Koeijer, Paauwe and Huijsman, 2014). They argue that HRM practices such as training and development, performance appraisal and rewards, team working and autonomy, participation and job design, recruitment and selection, employment security and work/life balance not only help an organisation to sustain their lean programmes but also foster employee wellbeing (de Koeijer, Paauwe and Huijsman, 2014). Hence, while these practices improve organisational performance in a lean service context, they bring happiness to employees and a trusting relationship among employees and their organisation (de Koeijer, Paauwe and Huijsman, 2014).

In brief, the literature on lean has highlighted several reasons for in-depth understandings of enabling HRM practices that support lean service. These practices, while assist service organisations to sustain their lean programmes (Atkinson, 2010), also enable them to maintain a humane orientation when deploying lean practices. Service organisations that could make the most of lean are therefore the ones that look after their employees by utilising HRM practices. While enabling HRM practices enhances lean deployment, they also improve employees’ behaviour in favour of lean service. Nevertheless, employees also benefit when their organisation adopt enabling HRM practices and, thus, lean service mutually benefits them. For that many reasons, several lines of evidence suggest that in-depth understandings
of enabling HRM practices significantly increase the existing theoretical and practical knowledge.

2.4.3 Underpinning theories to answer research questions

The choice of the most appropriate theoretical lenses to explore and analyse a phenomenon of interest and answer research questions in a research inquiry is critical and fundamental (Boer et al., 2015). The existing literature recommends “using theory parsimoniously, yet with confidence.” (Boer et al., 2015, p. 1231) In view of that, three theoretical lenses are used to explain the relationship of a potential HRM bundle and lean service in this thesis. These theoretical perspectives, used to guide answering the research questions, are: (i) contingency theory, (ii) bundle theory and (iii) configuration theory. The contingency theory suggests that the success of lean service is contingent on utilising a potential lean-specific HRM bundle. The bundle theory explains the constituent parts of the potential HRM bundle. Borrowing the bundle theory to explain the findings is an original contribution in this thesis. The configuration theory describes the synergy of the practices in the bundle. These theoretical perspectives are briefly explained and justified hereafter.

First, the contingency theory claims that an ideal course of action is dependent upon internal and external circumstances of an organisation (Delery and Doty, 1996; Sousa and Voss, 2008). There is no ‘one best way’ to lead and manage a lean programme and make lean-related decisions (Chavez et al., 2013). An optimal course of action to implement lean service is therefore contingent. It requires careful consideration of people management practices to satisfy and balance lean implementation needs with internal and external circumstances of an organisation (Chavez et al., 2013). In view of this theoretical perspective, a potential lean-specific HRM bundle suggests that the integration of lean practices in service operations is contingent upon the utilisation of lean relevant HRM practices as a bundle (Monks and Loughnane, 2006). For that reason, supporting lean practices requires the utilisation of such a potential lean specific HRM bundle to address, manage and direct the human element of lean service. This understanding also accords with the findings of Ahmad, Schroeder and Sinha (2003) and Dal Pont, Furlan and Vinelli (2008). They denote that HRM practices moderate the relationship between lean practices and organisational competitiveness.
In lean management research there are numerous examples of scholarly publications using contingency theory as a lens to guide research inquiries and answering research questions. For instance, Simons and Taylor (2007) use contingency theory as a lens to understand the impact of four elements (goals and values, logistics, human resources and management structure) on food value chain. Chavez et al. (2013), similarly, employ contingency perspective to draw a positive relationship between lean practices as an internal factor and operational performance dimensions such as quality, delivery, flexibility and cost. Netland (2016) uses this theoretical perspective to explain why companies still struggle to implement lean. The author, in line with the theory, argues that lean success is contingent on the situation of an organisation and several contingency variables that shape organisational perspectives of what counts as a success in lean implementation.

In this thesis, and similar to previous scholarly works (e.g., Simons and Taylor, 2007; Chavez et al., 2013; Netland, 2016), contingency theory guides the researcher to answer the first research question: ‘How do service organisations view the relevance of HRM practices to lean service?’ The rationale for this choice is that how a service organisation views the relationship of lean service and HRM practices reflects the internal and external circumstances of the organisation (Wood, 1999; Netland, 2016). The fit between human resource management and lean service deployment, as part of its business strategy and in its context, significantly dictates how the organisation undergoes a lean management programme (Wood, 1999; Chavez et al., 2013). Therefore, a service organisation in a highly unionised work environment, for instance, finds an HRM practice such as ‘labour relations’ as relevant to the success of its lean programme (Delbridge, 2003). As a result, the utilisation of a potential lean-specific HRM bundle for such an organisation and any course of action in using HRM practices to support lean service highly depend on the internal and external circumstances of the organisation (Shah and Ward, 2003).

Second, the bundle theory states that “a thing is a set of which properties are members, or that it is a whole of which properties are parts.” (Cleve, 1985, p. 95) Meaning that a lean-specific HRM bundle is difficult to conceive and describe without conceiving and describing what HRM practices constitute the bundle. Accordingly, with reference to the bundle theory, a proposed lean-specific HRM bundle, in this research inquiry, ought to indicate the HRM practices that form the bundle and the special relationship the practices maintain to one another. This relationship is necessitated (Casullo, 1988) by employing lean service which
necessitates a specific bundle of relevant HRM practices to support it. In the absence of the constituent parts (i.e. HRM practices) and the condition (i.e. lean service) that necessitates the special relationship in the bundle the proposed bundle ceases to be a lean-specific HRM bundle to support lean service. This understanding also concurs with the existing literature (e.g., Shah and Ward, 2003; Bello-Pintado, 2015; Galeazzo and Furlan, 2018) that bundling HRM practices is imperative to achieve operational improvements as part of operational excellence programmes such as lean management.

In lean management literature there are numerous examples of scholarly works using bundling to examine and explore the contribution of HRM practices to lean deployment and management. Although such studies do not make specific mention of the bundle theory, they make explicit reference to bundling HRM practices (and occasionally other lean practices) to support lean management. For instance, Shah and Ward (2003) bundle 22 lean manufacturing practices (including two HRM practices) into four bundles of JIT, TQM, TPM and HRM to investigate the impact of these bundles on operational performance in a lean management context. Furlan, Vinelli and Dal Pont (2011), on the other hand, empirically confirm that the HRM bundle enables the complementarity between the two bundles of JIT and TQM. Further, de Koeijer, Paauwe and Huijsman (2014) argue that the enabling HRM bundle creates mutual gains for employees and their organisation in a lean context. Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez (2014) explore how HRM could help a manufacture when transitioning to a lean production culture. These scholarly works are examples from the lean research with regard of using bundling to explore and understand the success factors in HRM throughout lean maturity stages.

Similar to previous scholarly works (e.g., Bello-Pintado, 2015), bundling and the bundle theory are employed to guide this research inquiry in answering the second research question: ‘What HRM practices do service organisations utilise to orient their employees to support lean practices?’ The rationale for employing this theory is that lean necessitates a special relationship of reinforcing, overlapping and synergizing among the constituent HRM practices of a lean-specific HRM bundle (de Koeijer, Paauwe and Huijsman, 2014). This rationale is also evident in the case of Subramony (2009, p. 745) who argues that “HRM bundles have significantly larger magnitudes of effects than their constituent individual practices.” This rationale can also be clearly seen in other scholarly works (e.g., de Koeijer, Paauwe and Huijsman, 2014) that multiple complementary HRM practices as an HRM
bundle outperform individual practices. However, there is no consensus about the nature and content of an HRM bundle in the existing literature (de Koeijer, Paauwe and Huijsman, 2014). As a result, using the bundle theory as a lens to guide answering the second research question ensures that only HRM practices that reinforce, overlap and synergize as a bundle to support lean service are bundled together to form a potential lean-specific HRM bundle in this research inquiry.

Third, the configuration theory is “concerned with how the pattern of multiple independent variables is related to a dependent variable rather than with how individual independent variables are related to the dependent variable.” (Delery and Doty, 1996, p. 804) The basic question that this research inquiry attempts to address is ‘how’ and ‘why’ potential HRM practices work synergistically within a specific bundle to support lean service. Such a question is in line with the basic tenants of the configuration theory to explore how a lean-specific HRM bundle should be structured in order to be effective to support lean service (Greenwood, 2008). Accordingly, with reference to the configurational perspective, the findings should indicate how the synergy of the lean relevant HRM practices in the proposed bundle play an enabling and enhancing role in the process of lean service deployment (Delery and Doty, 1996; Ahmad, Schroeder and Sinha, 2003; de Treville and Antonakis, 2006). The configuration of HRM practices in a proposed lean-specific HRM bundle in this thesis is therefore guided by the three core assumptions of the configuration theory (Greenwood, 2008). First, the effectiveness of the proposed bundle is affected by the arrangement and coordination of the HRM practices that form the bundle (Greenwood, 2008). Second, the configuration of HRM practices in the proposed bundle denotes that there is no ‘one best way’ of arranging and coordinating the practices within the bundle (Greenwood, 2008). The arrangement and coordination of the practices fulfil a specific organisational need (and in the context of this thesis, to support lean service) (Bello-Pintado, 2015). Third, the configuration among the HRM practices in the proposed bundle could partly depend on the lean maturity stage of a case study organisation (Greenwood, 2008; Netland and Ferdows, 2016).

In lean management research there are numerous examples of empirical work using configuration theory as a guiding lens to answer research questions. For instance, de Treville and Antonakis (2006, p. 99), using configuration theory as a lens, “suggest that a configuration of lean production practices is more important for worker intrinsic motivation than are independent main effects”. Similarly, Shah and Ward (2007) employ configuration
theory to explain synergies among the main components of lean production from a historical evolutionary perspective. Galeazzo and Furlan (2018), on the other hand, using configuration theory, attempt to understand if different financial performance outcomes reflect different configuration of lean production practices as a bundle. They suggest that success in terms of financial performance is the result of not only the ‘right’ configuration of lean practices in a bundle but also the ‘right’ configuration among various lean bundles a financial organisation might have (Galeazzo and Furlan, 2018). The aforementioned scholarly works indicate that configuration theory is generally employed as a lens to guide a research inquiry to understand the internal coherence between independent elements and a dependent one in a potential bundle to support a specific organisational need.

In this research inquiry, the emphasis within a proposed bundle is upon the internal coherence and the arrangement of the HRM practices in supporting a lean service programme in an organisation (Greenwood, 2008). Therefore, like previous scholarly works (Shah and Ward, 2007), configuration theory guides the researcher in answering the third and fourth questions:

- How do service organisations use enabling HRM practices to support lean service?
- Why do service organisations use enabling HRM practices to support their lean programmes?

These two questions attempt to explore the synergies and interactions among potential HRM practices that form a potential lean-specific HRM bundle to support lean service. Such synergistic relationships are high-level interactions among the practices within the bundle that generally occur in the form of internally coherent clusters of relationships (Miller and Friesen, 1978). Therefore, the rationale for employing this theoretical perspective is that the synergistic effect between the HRM practices in the bundle and lean service, which is explored using ‘how’ and ‘why’ research questions, reflects “distinct characteristics that occur together” (Shah and Ward, 2007, p. 791). It is therefore safe to suggest that the effectiveness of any proposed HRM bundle to support lean service in this thesis is the function of the degree of ‘fit’ achieved among the HRM practices in the bundle and between the bundle and the strategy of the case study organisations in terms of lean service implementation (Greenwood, 2008).
In view of all that, exploiting a potential lean-specific HRM bundle prepares the playing ground for lean practices and allows service organisations to integrate lean in all aspects of their organisation (Dal Pont, Furlan and Vinelli, 2008). This understanding also suggests that without a proper utilisation of the entire potential lean-specific HRM bundle, even if lean does not fail, it becomes a limited application of lean tools and techniques. This realisation is also in line with the findings of previous scholars such Ahmad, Schroeder and Sinha (2003) and Taylor, Taylor and McSweeney (2013). They found that a synergy of HRM practices is essential to be exploited by organisations to achieve superior performance through lean management. This synergy is necessary to manage and orient the human element of lean management (Sparrow, Hird and Cooper, 2014).

2.5 Summary of chapter

In this chapter, the relevant literature has been thoroughly and critically reviewed. The review reveals that lean originates from a manufacturing context, but its benefits have also been realised in the service sector. The various definitions of lean share two main components: eliminate waste and create value. Therefore, service organisations, among other objectives, employ lean tools and techniques to eliminate waste and create value. The review, also, reveals that lean has several abstraction levels. Despite variation in the abstraction levels, service organisations ought to have effective involvement of their workforce and their buy-in to support their lean programmes. Consequently, the review highlights that enabling HRM practices, in the form of an HRM bundle, are crucial to utilise to support lean service. One major issue, however, is that there is a significant ambiguity around enabling HRM practices that service organisations could utilise to enable their workforce to support it. This clearly marks a research gap for this study to tackle.
Chapter 3: Research design

This chapter discusses and justifies the elements of the research design. First, it acknowledges the philosophical assumptions of the researcher; namely, the ontology, epistemology, axiology and methodology. Then, it explains the research approach and logical reasoning of the study. After that, it covers the methodological choice of the researcher and answers why a qualitative approach was appropriate in this study. Later, it highlights the research strategy for data collection and discusses the appropriateness of case study strategy. Then, data collection techniques and data analysis approach are explained and justified. The chapter ends with a summary of the research design.

Chapter outline

3.1 Introduction ........................................................................................................ 81
3.2 Research philosophy............................................................................................. 82
3.3 Research approach .............................................................................................. 86
3.4 Methodological choice ......................................................................................... 88
3.5 Research strategy .................................................................................................. 90
  3.5.1 The nature of the research question ............................................................... 90
  3.5.2 The choice of case study research ................................................................. 92
3.6 Time horizon ......................................................................................................... 96
3.7 Data collection ....................................................................................................... 97
  3.7.1 Data collection timeline .................................................................................. 97
  3.7.2 Obtaining ethics approval ............................................................................... 99
  3.7.3 Negotiating access ......................................................................................... 100
  3.7.4 Case study profile .......................................................................................... 101
  3.7.5 The S-Curve of lean maturity stages ................................................................ 102
  3.7.6 Designing interview schedule ....................................................................... 106
  3.7.7 Guiding interview questions ......................................................................... 107
  3.7.8 Piloting the interview schedule ...................................................................... 114
  3.7.9 Participants’ informed consent ....................................................................... 114
  3.7.10 Sampling strategy ......................................................................................... 115
  3.7.11 Data collection techniques .......................................................................... 117
    3.7.9.1 Semi-structured interviews .................................................................... 117
    3.7.9.2 Direct observation .................................................................................... 119
    3.7.9.3 Documentary evidence ........................................................................... 120
  3.7.12 Data collection challenges .......................................................................... 128
3.8 Data analysis .......................................................................................................... 130
  3.8.1 Employing thematic analysis ......................................................................... 130
  3.8.2 Theming with NVivo software packages ....................................................... 132
  3.8.3 Phases of thematic analysis ........................................................................... 143
  3.8.4 Rigour in thematic analysis: a 15-point checklist ........................................... 152
3.1 Introduction

For a systematic flow of information, the structure of this chapter follows the layers of the research ‘onion’ (suggested by Saunders, Lewis and Thornhill, 2016, p. 124). In peeling off each layer of the onion, the researcher explains and justifies each element of choice in the research design.

This research is qualitative due to its exploratory nature. In lean literature there are numerous examples of qualitative research to explore a phenomenon of interest (e.g., Simons and Russell, 2002; Senot, Chandrasekaran and Ward, 2016). Creswell (2017, p. 41) summarises qualitative research as “We think metaphorically of qualitative research as an intricate fabric comprising minute threads, many colours, different textures, and various blends of material.” When a researcher seeks for guidance to design a qualitative research, “There is no agreed upon structure for how to design a qualitative study.” (Creswell, 2017, p. 49) For that reason, the researcher chooses to follow the research ‘onion’ to discuss the research design. The choices of the researcher are highlighted in green in Figure 6.

![Research design choices in this study](Figure 6: The research ‘onion’ (Saunders, Lewis and Thornhill, 2015, p. 124))
The rationale to employ the research ‘onion’ is two-fold. First, it is an effective approach to systematically discuss the elements of research design. Second, the research ‘onion’ is a comprehensive approach to organise a research enquiry.

3.2 Research philosophy

A researcher brings philosophical assumptions to a research endeavour. These are ontology, epistemology, axiology and methodology (Creswell, 2017). Understanding the philosophical assumptions within which this research inquiry exists is therefore a prerequisite to choose an effective research design to answer the research questions in section 1.4 (Creswell, 2014). The answer to these questions reflects how the researcher views knowledge and how such knowledge is accessed. In this study, the researcher adopts a relativist ontology, an interpretivist epistemology, an axiology that acknowledges that research is value bound and an inductive research approach. These elements are discussed hereafter, and a summary is provided in Table 5.

Research philosophy is a set of beliefs and abstract ideas a researcher holds about the nature of knowledge (i.e. reality) and how it is accessed (Bryman and Bell, 2015). “Whether we [researchers] are aware of it [research philosophy] or not, we always bring certain beliefs and philosophical assumptions [ontology, epistemology, axiology and methodology] to our research.” (Creswell, 2017, p. 15) It is decisive to understand the philosophical assumptions of a researcher when considering the findings of a study. These assumptions about knowledge guide a researcher’s choice of research approach logic, methodology, research strategy, data collection techniques and data analysis procedure (Crotty, 1998). Philosophical assumptions are like lenses through which a researcher views the world.

The ‘paradigm interpretative frameworks’ such as positivism, critical realism, interpretivism, post modernism and pragmatism are the enactment of philosophical assumptions of a researcher. It is therefore safe to state that research design and philosophical assumptions of a researcher are closely linked (Creswell, 2017). Following this line of thinking, it is essential for the researcher to explain his philosophical assumptions in this thesis hereafter.

There are four philosophical assumptions the researcher holds: ontology, epistemology, axiology and methodology (Creswell, 2017). Ontology is concerned with the nature of
knowledge and its characteristics (Creswell, 2017). It highlights a researcher’s position in terms of the nature of knowledge (Mason, 2002).

The ontological perspective of a researcher could be objective, subjective or somewhere between the two (Saunders, Lewis and Thornhill, 2016). An objective ontological perspective indicates that knowledge and social entities (actors) exist independently of a researcher (Saunders, Lewis and Thornhill, 2016). On the other hand, a subjective ontological perspective acknowledges that knowledge is the construction of social actors (Saunders, Lewis and Thornhill, 2016). In this thesis, the researcher assumes a subjective ontological perspective, meaning that there are multiple realities and these realities are expressed through many views of participants.

A subjective ontology views knowledge as the product of the perceptions of social actors and actions that result from such perceptions (Saunders, Lewis and Thornhill, 2016). To explore a phenomenon of interest, a subjective ontology therefore dictates that the phenomenon be studied in its natural context from the perspective of its social actors (Saunders, Lewis and Thornhill, 2016). Consequently, this ontology signposts that there are multiple realities (viewpoints) that the researcher must access via multiple ways of inquiry, i.e. reality is relative—a relativist ontology (Yin, 2016).

A relativist ontology (assumed by the researcher, see Table 4) acknowledges that what is ‘reality’ in terms of knowledge is relative to social actors (Yin, 2016). Accessing such ‘reality’ is dependent on a researcher and social actors (Guba and Lincoln, 1994; Chia, 2002). Accordingly, reality is an intersubjective account of meaning, viewpoints, perception and understanding of social actors.

This research embraces the idea of multiple realities. As part of this assumption, the researcher attempted to capture multiple realities on the phenomenon of the study using multiple forms of data collection techniques. The researcher collected, understood, analysed, interpreted and reported these multiple realities as themes from the findings (see Chapter 4: Findings).
Table 4: Philosophical assumptions adopted in this research

<table>
<thead>
<tr>
<th>Philosophical assumption</th>
<th>What does it mean in this study?</th>
<th>How does it reflect in the study?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology</td>
<td>There are multiple realities and they are expressed through multiple viewpoints of participants.</td>
<td>The researcher has collected, understood, analysed, interpreted and reported these multiple realities as themes from the findings.</td>
</tr>
<tr>
<td>Epistemology</td>
<td>Subjective views of participants serve as knowledge and the researcher gets closer to participants to understand, analyse and report the subjective views of participants.</td>
<td>The researcher has mainly used evidential quotes from interviews and notes from observations as evidence to support themes.</td>
</tr>
<tr>
<td>Axiology</td>
<td>This study is designed to explore a topic of interest to the researcher.</td>
<td>The researcher has explored the phenomenon and developed an understanding to fill a gap in the literature and, also, fulfil prior personal curiosity.</td>
</tr>
<tr>
<td>Methodology</td>
<td>This study uses inductive research logic and the researcher studies the phenomenon in its context.</td>
<td>The researcher has used a ground-up approach to study the phenomenon and allowed themes to emerge from the data. The data was collected using naturalistic data collection techniques to form an in-depth understanding of the phenomenon.</td>
</tr>
</tbody>
</table>

Second, epistemology refers to what counts as knowledge and how to access it (Collis and Hussey, 2013). In this thesis (see Table 4), the subjective views of participants (i.e. social actors) serve as knowledge (Creswell, 2017). The researcher got closer to participants to understand, collect, analyse, interpret and report their subjective views. The underlying epistemology of the study is therefore interpretivism.
Interpretivism is an epistemological perspective which is based on a relativist ontology (Bryman and Bell, 2015). It assumes that knowledge is identified from the subjective experience of social actors (Denzin and Lincoln, 2013). It requires a researcher to collect, understand, analyse, interpret and report the perceptions, meanings, viewpoints and understandings of social actors as evidence to argue for and against a phenomenon of interest (Bryman and Bell, 2015).

Assuming an interpretivist epistemology therefore allowed the researcher to talk to participants (social actors) directly and collect, understand, analyse and interpret their perceptions, understandings, viewpoints, meanings as the primary source of data (Mason, 2002). It also enabled the researcher to utilise naturalistic data collection techniques such as interviews and observation to collect such primary data.

However, one main criticism to an interpretivist epistemology is that it’s subjective in nature (Hammersley, 2013). Since the understanding and interpretation of primary data is the product of analytical capability of a researcher, there is room for bias. Besides, the primary data generated is mainly the collection of subjective viewpoints and value of social actors. Social actors are not representative of their population and, consequently, reliability of the data and generalizability of the findings are limited.

The researcher acknowledges this viewpoint. However, the advantages of an interpretivist epistemology in this study outweigh such criticisms. An interpretivist epistemology allowed the phenomenon of the study to be studied in a great level of depth (Macdonald et al., 2002). The researcher gained insights into the particulars of the phenomenon of the study through various perspectives of the participants from the case study organisations (Macdonald et al., 2002). As a result, the primary data that has been generated for this study is trustworthy and honest. And so, the study has a high level of validity.

The third philosophical assumption is axiology (Creswell, 2017) which indicates the role of researcher’s value in a study (Saunders, Lewis and Thornhill, 2016). The axiology in an interpretivist epistemology is that research is value bound (Saunders, Lewis and Thornhill, 2016). The researcher is inseparable from the study because the interpretation of the findings is from the perspective of the researcher. In its simplest form, axiology clarifies the aim of a study from the perspective of a researcher (Saunders, Lewis and Thornhill, 2016). In this
study, the researcher aims to explore the phenomenon and develop an understanding to fulfil personal curiosity (see 1.3 Research ). It would be fulfilling for the researcher if the findings are cited by other scholars and help practitioners in the future.

The fourth philosophical assumption is methodology (Creswell, 2017) which refers to the research process. There are several characteristics of a qualitative research that shapes the findings of this study: (i) Logical reasoning (research approach) is inductive. (ii) Research design is emerging. (iii) Researcher’s experience of data collection and analysis is inseparable from the research (Creswell, 2017). The logical reasoning is inductive, meaning that the researcher attempts to generate themes from data to answer the research question (Gray, 2017). Since the guiding research question is exploratory, the researcher has adopted a case study strategy (Yin, 2018). The research is therefore qualitative in nature because the guiding research question requires capturing detailed and messy account of the phenomenon from its real world context (Mason, 2002).

<table>
<thead>
<tr>
<th>Philosophical assumptions</th>
<th>How they guide this research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology</td>
<td>Relativist</td>
</tr>
<tr>
<td></td>
<td>The researcher collects the view-points of the informants who agreed to be interviewed for this study.</td>
</tr>
<tr>
<td>Epistemology</td>
<td>Interpretivist</td>
</tr>
<tr>
<td></td>
<td>In Chapter 4, the researcher seeks to understand and interprets the subjective but meaningful experiences of the informants.</td>
</tr>
<tr>
<td>Axiology</td>
<td>Value-bound</td>
</tr>
<tr>
<td></td>
<td>The researcher is part of what is being researched.</td>
</tr>
<tr>
<td>Methodology</td>
<td>Inductive qualitative case study</td>
</tr>
<tr>
<td></td>
<td>The guiding research question is exploratory, the research design is emerging, and themes are generated from contextual data.</td>
</tr>
</tbody>
</table>

The essential elements of the methodology are further discussed in the rest of this chapter. The next section discusses the logical reasoning of this research.

### 3.3 Research approach

This study adopts an inductive approach. It analyses primary data to establish patterns, themes, consistencies and meanings (Gray, 2017). This choice is essential as the researcher
understands that exploring different perspectives of the informants of this study involves openness to novel ideas (Eisenhardt, Graebner and Sonenshein, 2016). An inductive approach suggests that a conclusion is unlikely to be false if the founding evidence of the conclusion is accepted as true. This section further discusses this approach in this study.

The logical reasoning of a study is deductive, inductive or abductive—a combination of both (Dewey, 1910; Saunders, Lewis and Thornhill, 2016). An inductive approach is adopted in this research because it allows the researcher to note and critically review the existing literature (Gray, 2017). However, the purpose of reviewing the existing literature is not to develop a conceptual framework or test a theory (Gray, 2017). It is to highlight a gap in the existing understanding (Eisenhardt and Graebner, 2007). Gray (2017, p. 20) has summarised this approach as:

It would not be true to say that the inductive process takes absolutely no note of pre-existing theories or ideas when approaching a problem. The very fact that an issue has been selected for research implies judgements about what is an important subject for research, and these choices are dependent on values and concepts. This may help to formulate the overall purpose of the research. But the inductive approach does not set out to corroborate or falsify a theory. Instead, through a process of gathering data, it attempts to establish patterns, consistencies and meanings.

Eisenhardt and Graebner (2007) also advocate that a critical understanding of the pre-existing literature is a prerequisite in an inductive approach: "Sound empirical research begins with strong grounding in related literature, identifies a research gap, and proposes research questions that address the gap." Following this line of thinking, the researcher has provided a critical review of the literature in Chapter 2: Literature review. This review has been for three reasons: (i) to highlight the gap in our existing understanding around enabling HRM practices to support lean service, (ii) to define key concepts of the study such as ‘human resources’ and ‘lean service’ and (iii) to develop the guiding research question (Saunders, Lewis and Thornhill, 2016).

Revisiting the quote from Gray (2017, p. 20), particularly, “Instead, through a process of gathering data, it attempts to establish patterns, consistencies and meanings.”; an inductive approach is appropriate for this research as it allows the researcher to gain insights and understand the meanings participants attach to enabling HRM practices to support lean service (Saunders, Lewis and Thornhill, 2016). It allows an analytical generalisation from specifics to general, meaning that the findings from the case study organisations analytically represent the population (Bryman and Bell, 2015).
Furthermore, this approach is common in qualitative studies because data collection is generally used to explore a phenomenon and identify themes and patterns (Bryman and Bell, 2015). It is concerned with the natural and real-world context of a phenomenon and the context is also integral in the analysis of data (Saunders, Lewis and Thornhill, 2016). The researcher benefits from the flexibility of this approach to reflect on the structure of the research design as the study progresses and the findings as they emerge. Such an approach also supports the philosophical assumptions of the researcher as it appreciates that the researcher is inseparable from the study. Therefore, it values honesty, trustworthiness, transparency and validity over reliability and statistical generalisation (Lincoln and Guba, 2000).

3.4 Methodological choice

A multi-method qualitative methodology enables the researcher to employ multiple data collection techniques such as interviews, observation and documental evidence to answer the research questions in section 1.4. This way depth and breadth of insight is captured (Saunders, Lewis and Thornhill, 2016). It also matches the philosophical assumptions of the researcher and the research approach. This section further discusses the methodological choice of the researcher.

As the philosophical assumption of the researcher is that there are multiple realities that need to be accessed in multiple ways (Gray, 2017), a multi-method qualitative methodology is an appropriate methodological choice in this study (Saunders, Lewis and Thornhill, 2016). A multi-method allows primary data to be collected from more than one data collection techniques. It allows the researcher to study the multi-dimensions of the phenomenon of this study in its context via multiple data collection techniques (Saunders, Lewis and Thornhill, 2016).

The ‘qualitative’ nature of this study denotes that it uses qualitative data as evidence to support findings (Eisenhardt and Graebner, 2007). Defining ‘qualitative research’ is the most difficult task in a qualitative research inquiry (Mertens, 2010). It is diverse in scope and covers several disciplines (Yin, 2016). A specific definition is not comprehensive to cover the diversity and multi-faceted nature of the qualitative research and a broad definition is too
general (Denzin and Lincoln, 2011). Nevertheless, in this study, the researcher adopts the definition of Denzin and Lincoln (2011, p. 3):

> Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.

The rationale for adopting this definition is that it is comprehensive about the characteristics of a qualitative research in several ways. First, it realises that qualitative research is contextual. Second, it portrays a researcher as a key player who is inseparable from that setting. Third, it acknowledges that reality is multiple. Fourth, it also appreciates the inductive logical reasoning in developing meanings. Fifth, it places social actors (participants and the researcher) in the centre research. The participants share the meanings they attribute to a phenomenon of interest with a researcher. The researcher, then, collects, understands, analyses, interprets and reports these meanings in the form of themes.

Sixth, the definition captures the emerging nature of research design in a qualitative study. As the researcher attempts to capture an in-depth understanding of the phenomenon; to achieve that aim, the research design is evolving. Such flexibility is particularly crucial in an exploratory study such as this one (Corbin and Strauss, 2008). Seventh, the definition recognises the researcher’s background through which the researcher reflects on the findings (for the researcher’s background, see 1.3 Research). Eighth, it acknowledges that a qualitative research enables the researcher to develop a holistic account of the phenomenon of interest. Therefore, the researcher finds this definition comprehensive enough to capture what is meant by a qualitative research in this thesis.

The qualitative research has advantage in this study. The gap in understanding is an under-researched area as it is demonstrated in Chapter 2: Literature review). The researcher wishes to capture a detailed contextual real-world account of enabling HRM practices to support lean service. The researcher also attempts to understand meanings participants of the study attribute to these HRM practises. Such a rich account of enabling HRM practices is the main recipe to elaborate, refine and extend theory (Voss, Johnson and Godsell, 2016). For that
purpose, an appropriate research strategy is case study research. The next section discusses the details of this research strategy.

3.5 Research strategy

The research question is the starting point for adopting case study research (Voss, Tsikriktsis and Frohlich, 2002). When the research question is ‘how’ and ‘why’, or exploratory in nature, an appropriate research strategy is prescribed in the literature to be case study research (Yin, 2018). Following this rationale, the appropriate research strategy for this study is case study research. The subsequent sub-sections further discuss why this research strategy is appropriate. First, the guiding research question is revisited. After that, case study strategy is discussed.

3.5.1 The nature of the research question

As outlined in the review of the literature, there is a gap in our understanding of how service organisations utilise HRM practices to support lean service. To address this gap, the researcher, first, disentangles the ‘HRM bundle’ from the four bundles of lean: TQM, JIT, TPM and HRM (Shah and Ward, 2003). Previously, Dal Pont, Furlan and Vinelli (2008) also attempted to disentangle lean bundles for their empirical work. The researcher then aims to explore the ‘HRM bundle’ in its natural and real-world context in the service sector. For that purpose, the main guiding research question is ‘How, in practice, do service organisations engage with HRM practices to support lean service?’ This question is then divided into four sub-questions to capture the depth and breadth of the phenomenon.

The first sub-question explores how the case study organisations (see 3.7.4 Case study profile) perceive the relationship of HRM practices and lean service. This allows the researcher to establish if the case study organisations consider the human element of lean service. For service organisations that consider the human element of lean service, the question then would be what HRM practices do they use to manage and direct their human resources to support lean service? This is where the second sub-question further helps this research inquiry.

The second sub-question allows the researcher to understand those HRM practices that the case study organisations utilise to support their lean programmes. This contextual and real-
world account of enabling HRM practices to support lean service enables the researcher to critically view and reflect on the various prescribed HRM practices in the existing literature. However, a critical reflection is incomplete if the findings do not clarify how those HRM practices are used by the case study organisations. The third sub-question is designed to elicit this information from the organisations.

The third sub-question explores how enabling HRM practices are utilised by the case study organisations to support lean service. The researcher goes beyond the provision of simple understanding of which HRM practice is relevant to lean service. While the existing literature suggests, for instance, that training and development is relevant to lean, this research question explores how training is relevant. Such in-depth understanding has theoretical and practical implications as it allows to differentiate between, for instance, training courses that specifically tailored to support lean service with those that are designed to address inefficiencies irrelevant to lean implementation.

With reference to Whetten (1989), research questions that answer ‘what’ and ‘how’ about a phenomenon—second and third sub-questions—only explain the phenomenon of interest in a study. To go beyond just describing a phenomenon; it is therefore necessary a researcher to ask ‘why’—the fourth sub-question. Whereas ‘what’ and ‘how’ describes the phenomenon of this study, ‘why’ explains it (Whetten, 1989).

The fourth sub-question explores why the case study organisations use HRM practices to support their lean programmes. This allows the researcher to explain why HRM practices are crucial to support lean in the first place.

The four sub-questions are formulated under the main guiding research question. The rationale for this formulation is that the guiding research question asks ‘how,’ an exploratory question in nature. It enables the researcher to: first, establish if service organisations find HRM practices relevant to lean implementation; second, identify what HRM practices they use to support lean service; third, describe how they use certain HRM practices for that purpose; and fourth, explain why they utilise HRM practices to support lean service. Therefore, the guiding research question is comprehensive and depicts the main elements of understanding of enabling HRM practices to support lean service (Whetten, 1989).
Observing the main research question and the sub-questions, they are exploratory questions. These questions require contextual and real-world data (Voss, Johnson and Godsell, 2016; Yin, 2018). The researcher compiles multiple perspectives of relevant social actors from multiple sources via multiple channels of data collection. Case study research is therefore prescribed to be highly effective for this kind of research endeavour. It enables the researcher to integrate similar and contrasting perspectives to build a rich and detailed understanding of the phenomenon in a service context (Gray, 2017). The use of case study research is also appropriate with the qualitative nature of this thesis (Saunders, Lewis and Thornhill, 2016). In the next sub-section, a thorough discussion about the choice of case study in this thesis is presented.

3.5.2 The choice of case study research

This research elaborates, refines and extends theory and therefore it adopts case study research. This section discusses this research strategy and justifies its adoption.

Case study research is a variant of qualitative research (Yin, 2016). In operations management research it is prevalent to develop, elaborate, refine and extend theories (Voss, Tsikriktsis and Frohlich, 2002). However, it is necessary here to clarify what exactly is meant by case study research. Creswell (2007, p. 97) defines it as:

Case study research is a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case themes.

Accordingly, case study research serves the purpose of this thesis. It is an empirical investigative strategy that allows the phenomenon (enabling HRM practices to support lean service) to be explored in its natural service context (Eisenhardt, 1989) when the boundary between the phenomenon and its context is not clearly defined (Yin, 2018). It also enables the researcher to understand past or current history of the phenomenon using multiple sources of evidence (Voss, Johnson and Godsell, 2016). Moreover, with reference to Voss, Johnson and Godsell (2016), it is a powerful strategy to answer research questions of ‘how’ and ‘why’—such as the ones of this thesis in section 1.4. Furthermore, “To show relevance to real-world practices, CS [case study] is commonly viewed as a proper research method to deploy.” (Choi, Cheng and Zhao, 2016, p. 382) The phenomenon of this study is inseparable from its context and employing case study provides the means to show relevance of the phenomenon.
with its real-world context. Case study research is therefore the most appropriate research strategy for this research inquiry (Voss, Johnson and Godsell, 2016; Yin, 2018).

Furthermore, there are four types of case study design: single-case, multiple-case, holistic (single unit of analysis) and embedded (multiple units of analysis) (Yin, 2018). This study uses holistic (single unit of analysis) multiple-case design. The details of the case study organisations are included in Table 6 and Appendix VII: Further details of case study organisations.

Table 6: Case study organisations and participants’ position of responsibility

<table>
<thead>
<tr>
<th>Case study organisation</th>
<th>Description</th>
<th># interviews</th>
<th>Participants’ position of responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>MyFinance</td>
<td>MyFinance provides investment products such as pension, life insurance, savings, mutual funds, asset management and banking.</td>
<td>5</td>
<td>Assistant Team Leader, Operations Manager, Head of Operational Services, Lead Lean Consultant and Managing Consultant</td>
</tr>
<tr>
<td>FineBank</td>
<td>FineBank provides banking facilities, finance and insurance services and consumer and corporate banking.</td>
<td>6</td>
<td>Design and Transformation Lead, Lean Leader, Design and Delivery Agent, Lean Leader, Lean Change Agent and Programme Support Manager</td>
</tr>
<tr>
<td>Hinance</td>
<td>Hinance provides image-based cheque clearing services.</td>
<td>4</td>
<td>Fraud Team Leader, CUI Supervisor and Site Lean Agent, Fraud/EPU Supervisor and Site Manager</td>
</tr>
<tr>
<td>EastManage</td>
<td>EastManage provides recycling and waste management services.</td>
<td>4</td>
<td>Head of Asset Management, Senior Operations Technician, Maintenance Manager and Plant Manager</td>
</tr>
</tbody>
</table>
The rationale for multiple-case studies is that it builds a stronger base for elaborating, refining and extending a theory—the purpose of utilising case study research in this study (Eisenhardt, 1989; Boyer and Swink, 2008). Multiple-cases ground the findings in rich data and therefore produce more accurate and analytically generalizable findings (Eisenhardt and Graebner, 2007). They also work as a replication logic in which each case represents a unique context to compare the themes of an emerging theory (Eisenhardt and Graebner, 2007).

In this thesis, purposefully selected case study organisations allow the replication of the findings (Eisenhardt, 1989). If two of the case study organisations provide supportive evidence in favour of a theme, the theme can be claimed as analytically generalizable (Gomm, Hammersley and Foster, 2000). Multiple-case studies therefore add to the robustness of this study (Eisenhardt, 1989; Boyer and Swink, 2008) and improve the analytical generalization of the findings (Gomm, Hammersley and Foster, 2000). When adopting case study research, the researcher asks several questions (Creswell, 2007):

1. What is the unit of analysis?
2. How are the case study organisations selected?
3. Who are the participants from the case study organisations?
4. How many case study organisations are selected?
5. How many participants are interviewed from each case study organisation?

First, the unit of analysis in this study is (multiple cases of) service organisations (Creswell, 2007). The purposefully selected organisations are categorised under the service sector in the Standard Industrial Classification of economic activities (SIC) 2007 (Companies House, 2015). Table 6 shows that MyFinance, FineBank and Hinance provide financial services and EastManage and HighEnd provide waste management and distribution services.
Second, to choose the relevant case study organisations, the researcher followed Miles and Huberman (1994). Figure 7 summarises the approach:

![Figure 7: Steps to select the case study organisations](image)

Third, the participants are from various levels, functions and departments from the case study organisations. Table 6 presents the position of responsibility of the participants in the case study organisations. This pool of participants allows the researcher to collect, understand and analyse viewpoints of various social actors with regard of HR-enabled lean service.

Fourth, “when a researcher chooses multiple cases, the issue becomes, ‘How many cases?’” (Creswell, 2017, p. 102). In the literature, ‘There is no one answer to this question. However, researchers typically choose no more than four or five cases.’ (Creswell, 2017, p. 102). Table 6 displays that this study uses data from five case study organisations. Eisenhardt and Graebner (2007) also supports this line of thinking and advocate that having three case studies is a modest number of cases to develop a rigorous, generalizable and testable theory.

Following this line of thinking, the researcher collects data from five case study organisations. Initial interviews suggest that the level of information that would be obtained from each organisation is sufficient to answer the research question of the study (Saunders and Townsend, 2016). The intent of selecting the case study organisations is to understand the phenomenon of the study in similar and different types of service activities (Creswell, 2017). MyFinance, FineBank and Hinance are selected to understand enabling HRM practices to support lean service in the context of similar service activities i.e. financial
services. The findings from these three case studies are then compared with the findings from EastManage, waste management services, and HighEnd, food distribution services. This way, the analytical generalisation is improved and the overarching themes come from the synergy of similar and different types of service activities in the service sector (Gomm, Hammersley and Foster, 2000).

Fifth, the researcher has conducted twenty-seven semi-structured interviews across the five case study organisations. Four additional interviews have also been conducted as pilot interviews to refine the guiding interview questions (3.7.7 Guiding interview questions). The number of the interviews in each organisation has depended on the level of information the researcher has collected and whether the level has been sufficient to answer the guiding research question (Saunders and Townsend, 2016).

To recap, this study finds case study research as the most appropriate research strategy to answer the guiding research question. It is utilised to elaborate, refine and extend existing theory on using enabling HRM practice to support lean service. When adopting case study research, another question that needs to be asked is the time horizon of data. Therefore, in the next section, time horizon of the study is discussed.

3.6 Time horizon

There are two time horizons for research: cross-sectional and longitudinal (Bryman and Bell, 2015). This study is cross-sectional, meaning that the researcher investigates the phenomenon of the study by taking snapshots of time (Saunders, Lewis and Thornhill, 2016). These snapshots represent the points in time when the interviews are conducted.

The interviews are conducted at single points of time between April and September 2016 (see 3.7.1 Data collection timeline). The rationale for cross-sectional time horizon is that it is more convenient with the time scale of the study. This framework enables the researcher to compare five case studies with regard of enabling HRM practices to support lean service at single points of time. In addition, the purpose of this study is not to establish causal relationship between variables. And so, the researcher only records observations about the phenomenon of the study without any manipulation to its real-world environment.
3.7 Data collection

The researcher aims to generate a rich description of enabling HRM practices to support lean service across several organisations in the service sector. The choice of multi-method data collection technique is essential to obtain the primary data for this study. Primary data which is generated through naturalistic data collection techniques is suitable, reliable and adequate to increase the existing understanding of the phenomenon of the study. While purposive sampling is used to select the case study organisations, a mix strategy of purposive and snowball sampling is used to select the participants (see 3.7.10 Sampling strategy). The researcher had begun data collection as of January 2016 and data collection continued until September 2016 (see 3.7.1 Data collection timeline). The subsequent sections provide further details of data collection in this research inquiry.

3.7.1 Data collection timeline

The researcher conducted the semi-structured interviews over six months from April to September 2016. This allowed the researcher adequate time to conduct each interview, immediately transcribe it and, then, reflect on the initial verbatim transcription of an interview. It also allowed the researcher to continuously revisit the interview questions prior to conducting the subsequent interviews and include (prompt) questions that further investigated and explored any emerging new areas of interest. Further, it also enabled the researcher to prepare for a thorough data analysis starting from October 2016 to generate the overarching themes (see 3.8 Data analysis). Figure 8 offers a visual presentation of the data collection timeline.
Figure 8: Data collection timeline
3.7.2 Obtaining ethics approval

The qualitative and exploratory nature of the research question of this study demanded the researcher to seek permission to access the case study organisations for data collection purposes (Creswell, 2017). In this context, as part of negotiating access, the researcher had to obtain ethics approval from the Ethics Approval (Human Participants) Sub-Committee of Loughborough University.

Obtaining ethics approval from the University Ethics Approval (Human Participants) Sub-Committee was an efficient and straightforward process. This was mainly because this study did not have any known harmful impacts on the prospective participants and the researcher. The researcher clearly explained this aspect of the study in his ethics proposal to the University Ethics Committee. The main important points of the ethics proposal are included hereunder:

- Participation in the study is voluntary.
- Participants can withdraw from the study at any time from when an interview is conducted to when the data is analysed and incorporated into the final report.
- The purpose of the study and the procedure of data collection are clearly explained for participants.
- The researcher guarantees the anonymity of the participants and the confidentiality of their data.
- A clear procedure for encrypting the data and storing it on the University secure servers are also included in the proposal.
- The researcher is clear about any known risks and disclosed such risks to participants if there is any.
- The researcher is also clear that there are no financial incentives for the participants to take part in the study.

Taken together, the researcher considered the ethical consideration to be significant. This consideration stemmed from negotiating access, involving participants, asking participants questions for their viewpoints, collecting their viewpoints to asking participants to allow time for the semi-structured interviews. To demonstrate awareness of ethics and protect the welfare of the participants, the researcher obtained institutional ethics approval from the
3.7.3 Negotiating access

The researcher drafted a cover letter, a summary of research and the interview schedule at the beginning of January 2016. The cover letter was to establish the initial contact with potential service organisations in the UK (see Appendix II: Correspondence with potential service organisations). The summary of research was to provide a succinct version of research in terms ‘what is generally about?’, the research question, ‘what the researcher hopes to explore’ and a brief introduction of the researcher (see Appendix IV: Flyer used to communicate research).

At the beginning of February 2016, the researcher began sending out invitations to purposefully selected list of service organisations. The researcher utilised several approaches to compile the list of the organisations. These mainly included:

- Potential contacts that were suggested by research supervisors
- Emailing lean consultancy firms and lean consultants in the UK for recommendations of potential contacts among their clients who could meet the criteria of case selection of the study
- Using LinkedIn website (www.LinkedIn.com) to locate potential contacts and post an ‘invitation to participate in research’ on Lean Six Sigma group page (a LinkedIn group that has half a million members worldwide)
- Communicating with customer service departments of several organisations, which had employed lean practices, via Facebook and request to be put in contact with lean deployment team in the organisations
- Using Twitter (www.twitter.com) to approach members of lean deployment teams in service organisations
- Posting an ‘invitation to participate in research’ to British Academy of Management (BAM) community via the BAM E-Newsletter in March 2016. As of July 2018, the link could be found at: https://www.bam.ac.uk/news-story/8795

For every potential contact, the researcher used email, LinkedIn InMail, Facebook messaging service, Twitter Direct to establish the initial contact. These usually followed by a phone call.
if further details were requested. The initial invitations included a cover letter and a summary of research. Additional emails, messages and phone calls were used to set the most convenient time and place for an initial interview with a potential contact.

In the initial interview with a potential organisation, the researcher solicited for access permission, ensured the study met the ethical requirements of the organisation, sought consent of the organisation for further interviews, ensured that issues pertaining to participants’ access did not rise and confirmed interviews could be conducted within the scheduled time-frame. And so, in the initial interview, the choice of a potential contact (service organisation) as a case study organisation was considered (this followed Figure 7). Once the initial interview was deemed successful by the researcher, he sought to recruit participants from the organisation.

The next section discusses the initial number of service organisations contacted and the case profile of the five case study organisations selected for this research inquiry.

3.7.4 Case study profile

Initially, more than 30 service organisations were contacted to participate in this research. However, only ten expressed willingness. After conducting the initial interviews with participants from the list of ten, only five fulfilled the criteria of a case study in this thesis (see 3.5.2 The choice of case study ). Therefore, data was collected from the five service organisations listed below:

- **MyFinance** provides investment products such as pension, life insurance, savings, mutual funds, asset management and banking.
- **FineBank** provides banking facilities, finance and insurance services and consumer and corporate banking.
- **Hinance** provides image-based cheque clearing services for banks across the UK.
- **EastManage** provides recycling and waste management services for households and businesses across the UK.
- **HighEnd** is a multi-temperature food distribution centre that serves around 500 stores in the UK.
The real name of the organisations is withheld to meet ethical requirements of Loughborough University. MyFinance, FineBank and Hinance were selected to understand HR-enabled lean services in financial services. The understanding from these three was then compared with EastManage, waste management services; and HighEnd, food distribution services. This way, the analytical generalisation is improved and the overarching themes are the synergy of themes from service organisations engaging in similar and different types of service activities (Gomm, Hammersley and Foster, 2000). Further details of the case study organisations are provided in Appendix VII.

3.7.5 The S-Curve of lean maturity stages

The S-Curve of lean maturity stages, developed by Netland and Ferdows (2016), illustrates that organisations move from exploration to exploitation when implementing lean. Not considering this curve leads organisations to set flawed targets, have arbitrary expectations and take unfitness actions when employing lean (Netland and Ferdows, 2014). Scholars also make inaccurate interpretation of empirical data obtained from organisations at different maturity stages of lean when not considering the curve (Netland and Ferdows, 2016). Therefore, the researcher has drawn on the S-Curve of lean maturity stages when selecting the case study organisations for this research (see Table 7).

<table>
<thead>
<tr>
<th>Lean maturity stage</th>
<th>Justification [This column is based on Netland and Ferdows (2016)]</th>
<th>Case study (CS)</th>
<th>Evidential quotes from the interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>• CS started employing lean practices in pilot areas.</td>
<td>HighEnd</td>
<td>“… eighteen months we started but still we are in the early infancy… so, we've done Kaizen events on couple of the big areas where we go from end to end, do the process stream mapping, waste walks, do 5s, so, just do all the basic principles to say where is the opportunities here.” (Ian, Distribution General Manager, HighEnd)</td>
</tr>
<tr>
<td></td>
<td>• CS was under immediate pressure to employ lean to improve services.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Learning from pilot areas had yet to be replicated organisation-wide.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
<td>Example</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>In-transition</td>
<td>• Certain tools and techniques of lean were thoroughly implemented.</td>
<td>“... back in the two thousand and thirteen...we've trained about forty green belts in the business and we've trained them in lean...we've got everybody involved, so, we did things like 5s...people listened to us and started again with that skill a little bit more involvement and ground swelling ... solve the problems that came ... all then said: 'Yeah, crack on and do what you need to do,' which ensured that they were happy, and their ideas were listened to...” (Andy, Head of Asset Management, EastManage)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rapid improvements and quick results were achieved due to quick fixes using lean tools.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Change in organisational culture was in the horizon.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rapid increase in key performance indicators and operational performance measurement were evident.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td>• CS achieved high operational performance levels.</td>
<td>“Seven years now... very beneficial. We normally achieve something in around 20% financial benefits when we do a deployment and we will, and also be able to evidence and uplift in customer...reduction of cost ... It [lean] creates good engagement with staff because it's done through staff rather than to staff.” (Mike, FineBank, Design and Transformation Lead)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Performance metrics were well-defined.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A ‘lean culture’ in which employees continually aim higher targets was created.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lean projects aimed at long-term impact.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cutting-edge

• CS was among the top performers in industry.
• CS was recognised for its excellence operational performance.
• CS kept momentum in employing best practices and sustaining them.
• Lean tools were integrated in business as ‘business as usual’.

MyFinance

“It [lean] has had different guises. The first time would have been for a cost reduction point of view. It was the answer to: We need to save 30%, how do we do it? And the answer was lean. That's when our first interaction was. However, that's massively changed now. It's from a customer perspective … I think lean has worked for us in both guises…our director is always up for change and to do things differently and that does massively support how you get lean through the blood of operations.” (Jenny, Head of Operational Services, MyFinance)

As Table 7 presents, HighEnd was in the Beginner stage. This means that the organisation was in the exploration phase of lean journey. In this stage, the company had begun deploying lean practices in pilot areas across the organisation. Success of lean practices in the pilot areas was then intended to be transferred to other areas of the organisation. As part of the move, the cultural change, resistance to lean ways of working could have been felt during the site visits. However, the organisation was determined to keep improving its service delivery processes using lean tools and techniques.
Hinance was in the In-transition stage. This means that the organisation had started the exploitation phase of lean service. If compared to the Beginner stage, it had integrated lean principles to workplace practices to a greater degree. For that reason, during the data collection period, it was experiencing some radical improvements to its service delivery processes and a sequence of quick gains from lean practices were evident. Although it initiated its lean programme four years ago, still a cultural shift was happening from old culture to a lean way of service delivery. However, a breakthrough in terms of cultural shift was on the horizon if it has kept its momentum. Despite this, Hinance has obtained significant benefits from improving its operational performance by employing lean practices.

Lean journey at EastManage was in its fifth year when the interviews were conducted. In terms of lean maturity stage, it was also in the In-transition stage. This means the organisation had started the exploitation phase of lean service. It had integrated lean
principles to workplace practices to a significant level. When data collection was conducted, participants were commenting on a sequence of quick gains from employing lean practices. The cultural shift seemed to have been happening as the participants were positive about lean ways of doing their work. Lean practices had enabled the company to significantly increase its recycling rate from 45% to 56% by 2015. Hinance and EastManage, together, provided an in-depth understanding of enabling HRM practices at In-transition stage.

FineBank was in the Advanced stage. This means that the organisation had relatively a high-performance level of employing lean practices. It had already been in the two stages of lean maturity: Beginner and In-transition. Its operational metrics were best if compared to other banks in the industry which have employed lean services. It had also been able to create a lean culture where performance targets were continually set higher.

MyFinance was in the Cutting-edge stage. This means that the organisation was in the highest level of lean service. It was a top performer in providing financial services and was considered as one of the best among financial service providers in the UK. It was recognised for its lean service operations. Although by the time of the data collection MyFinance had embarked on lean journey almost ten years earlier, it was still keeping momentum in terms of sustaining its lean practices.

As Figure 9 and Table 7 illustrated, data is collected from service organisations that represent different stages on the S-Curve of lean maturity stages. This enables the researcher to obtain a deeper and grounded understanding of enabling HRM practices to support lean service along the different and related stages of lean maturity.

3.7.6 Designing interview schedule
To draft and design the interview schedule, the researcher used the existing literature as a guide. The questions were refined under the guidance of the research supervisors in terms of the number and the exploratory nature of the questions. The questions were made fit for semi-structured interviews.

Gary (2017) recommends a researcher uses exploratory questions in semi-structured interviews as these sort of questions allow a researcher to use prompts to further explore
interesting points that may emerge during an interview. For that reason, the questions of the interview schedule were designed to elicit detailed and clear responses from participants in the form of viewpoints, understanding, meanings, perceptions and experience.

The exploratory nature of the questions allowed the researcher to ask prompts and follow up questions for in-depth exploration of interesting remarks made by the participants during the interviews within the guided format of the discussion. The next sub-section presents the guiding questions that were asked in the interviews.

### 3.7.7 Guiding interview questions

The total guiding questions asked in the interviews were twelve questions (see Table 8). The first question was asked to elicit information from the interviewees to answer the first research question of the thesis (see 1.4 Research aim, question and objectives). This followed by a transitional question. The second question was asked to move the discussion from lean in general to using HRM practices to support lean service. Next, nine questions were asked to generate data from the interviews to answer second, third and fourth research questions. Towards the end of each interview, question 12 was asked to understand if the interviewees would do anything differently in terms of utilising HRM practices to support lean service if they start lean service all over again. This question was also intended to explore the informants experience and practice from their involvement in lean service and elicit more detailed responses of suggestions and feedback on lean programmes in their organisation. It allowed the interviewees to share any thoughts or opinions that they felt the need to about lean service in their organisation.

Furthermore, probing questions were recurrently asked to get clarification on points that were made by the informants during the interviews. Some of those questions included:

- Tell me more about (for instance) modular training/royal visit/lean champions in your organisation.
- How did you feel about (for instance) the purpose of lean service/lean training approach of ‘who knows and who doesn’t know’ in your organisation?
- What do you mean by graphite board/horse trading/moan zone?
Such probing questions were also used to get more information about the answers the interviewees were giving to the guiding interview questions.

Table 8: Guiding interview questions, their purpose and supporting references

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Purpose</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Why do you think lean is implemented by your organisation? How long it has been used by now? How well does it work for your organisation? Any issues with lean implementation so far?</td>
<td>This question explores what lean is to the organisations. That’s to say, is it a holistic improvement journey that comprises all the aspects of the organisations (inclusive of the HRM) or it is viewed as a set of tools and techniques. In the former case, it is surprising if the HRM practices of the organisations are not part of the lean implementation. However, in the latter case, the approach to lean does not necessarily involve the HRM practices. This question also explores if there is a general belief among the informants in the organisations that lean contains opportunities for improving aspects of their organisation. It helps the researcher to understand if the interdependencies and interactions among the components of lean are known to the informants. It also explores the advantages and disadvantages of lean implementation to the organisations. This question also explores differences and similarities of the informants’ responses due to their varying roles and levels in the organisations i.e. how an informant views lean in their organisation reflecting their role and level in the organisations. It observes how the organisations have re-defined value from the standpoint of the informants and how each step of the process of lean has thought through carefully. It invites the informants to share with the researcher if their organisation has experienced any problems/issues with lean service implementation and deployment.</td>
<td>(Forrester, 1995; Shah and Ward, 2007; Atkinson, 2010; Beauvallet and Houy, 2010; Arlbjørn and Freytag, 2013; Sparrow, Hird and Cooper, 2014; Bortolotti, Boscari and Danese, 2015; Langstrand and Drotz, 2016)</td>
</tr>
<tr>
<td>2</td>
<td>What role does people management play in lean implementation? Have people management policies and practices changed to support lean? If yes, could you tell me what those changes are?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The main purpose of lean is to improve efficiency and ensure continuous improvement. The workforce of an organisation, rationally, should play an important role in improving efficiency and ensuring continuous improvement. The HRM practices that an organisation utilizes to recruit, manage, develop, and retain its workforce should therefore have a decisive role in the process of lean service deployment. This question invites the informants to shed lights on the use of HRM practices in their organisation. It explores whether HRM practices are fully utilised along the process of lean implementation. It uncovers any challenges relevant to utilising HRM practices that do not allow the full utilisation of HRM practices to support lean service. It also helps the researcher to learn how the organisations have dealt with any challenges such as whether they have clarified lean for the informants in advance, communicated its requirements to them, consulted and involved them in the process, have used an appropriate language and terminology to spread its reach in the context of the organisations, have conveyed the know-how of the technical and non-technical aspects of lean implementation and ease the experience of the informants and have sought feedback and input from them on how to better fit lean into the context of their organisation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Cook and Graser, 2001; Delbridge, 2003; Dal Pont, Furlan and Vinelli, 2008; Atkinson, 2010; Beauvallet and Houy, 2010; Liker and Hoseus, 2010; Bamber et al., 2014; Martínez et al., 2014; Moyano-Jurado, 2014; Sparrow, Hird and Cooper, 2014; Thirkell and Ashman, 2014; Bello-Pintado, 2015; Bortolotti, Boscari and Danese, 2015; Boxall and Purcell, 2015)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RQ2:** What HRM practices do service organisations utilise to orient their employees to support lean practices?

**RQ3:** How do service organisations use enabling HRM practices to support lean service?

**RQ4:** Why do service organisations use enabling HRM practices to support their lean programmes?

<table>
<thead>
<tr>
<th>3</th>
<th>Has your organisation made any changes to job design and job characteristics in order to support lean implementation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean brings work standardisation to workplace. Work standardisation impacts work design throughout an organisation. This question explores whether lean has had any impact on standardisation and work design in the organisations. It explores whether the organisations have used changes in work design to orient employees towards lean implementation. It also helps the researcher to learn if the informants are aware of changes in the work design and the nature of their job roles and activities.</td>
<td></td>
</tr>
<tr>
<td>(Cook and Graser, 2001; Atkinson, 2010; Cullinane et al., 2012, 2014, 2017; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2013; Sterling and Boxall, 2013; Sparrow, Hird and Cooper, 2014)</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Question</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>Has lean changed what you are looking for when you hire new employees? Have you changed recruitment and selection procedures to reflect that?</td>
</tr>
<tr>
<td>5</td>
<td>Have you made any changes to employee training and development in order to support lean programme?</td>
</tr>
<tr>
<td>6</td>
<td>Have systems and practices of employee appraisal and goal setting changed as a result of lean implementation?</td>
</tr>
<tr>
<td>7</td>
<td>Have your pay and compensation scheme changed as a result of lean implementation?</td>
</tr>
<tr>
<td>8</td>
<td>Could you tell me about employee communication practices you use, for example employee newsletters, briefings, etc.? How do you think employee communication is used to support lean?</td>
</tr>
<tr>
<td></td>
<td>How do you make use of employee involvement and empowerment to support lean?</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>Does your organisation organise work through teams? Has this changed since you employed lean?</td>
</tr>
<tr>
<td>11</td>
<td>The ‘how to’ guides to lean stress that ‘respect for people’ is one of the key principles of lean. What has your organisation done to foster respect? How well do you think it has worked?</td>
</tr>
</tbody>
</table>
Wrapping up overall discussion

| 12 | Reflecting on your overall experience of lean service, how important do you think people management policies and practices are in supporting lean? If you were starting again, what would you do differently? Would you look to give HRM a different role? | This question helps the researcher to dig deeper into the relationship of HRM practices and lean in the organisations from the perspective of the informants. The answers to this question and the analysis of the responses provide clues about various aspects of the relationship of HRM and lean service. This question also invites the informants to recommend and suggest steps or actions that might help with the implementation of lean in other service organisations. It is an invitation to take a moment and think if anything can be done differently in order to improve the HRM and lean relationship in their organisation. Further, it gives the informants a chance to share their experience of ‘I wish this was done differently’ with the researcher and the researcher with the academic community. Their responses would help other service organisations trying to implement lean service. (Shah and Ward, 2003; de Treville and Antonakis, 2006; Tracey and Flinchbaugh, 2008; Beauvallet and Houy, 2010; Bamber et al., 2014; Thirkell and Ashman, 2014; Bello-Pintado, 2015; Bortolotti, Boscari and Danese, 2015) |

The guiding interview questions were therefore planned as four parts: (i) an introductory question, (ii) a transitional question, (iii) body questions and (iv) a concluding question (see Table 9).

<table>
<thead>
<tr>
<th>Part</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory question</td>
<td>to elicit information about the deployment of lean practices in the case study organisations</td>
</tr>
<tr>
<td>Transitional question</td>
<td>to move from introductory to body questions and ask the participants how they find the relationship of enabling HRM practices and lean service in their organisation</td>
</tr>
<tr>
<td>Body questions</td>
<td>several questions about how HRM practices were utilised by the case study organisations to support lean service</td>
</tr>
<tr>
<td>Concluding question</td>
<td>to reflect on experience of lean service and the role of HRM practices to support it</td>
</tr>
</tbody>
</table>

As Table 9 displays, the introductory question was designed to elicit information about the deployment of lean practices in the case study organisations. The transitional question from introductory to body questions was to ask the participants how they find the relationship of
enabling HRM practice and lean service in their organisation. The body questions had several questions about several HRM practices and how they were utilised by the case study organisations to support lean practices. A list of potential HRM enablers was obtained from the existing literature prior to the interviews (see 2.3.4 Enabling HRM practices). After that, the participants were asked one more question. They were invited to reflect on their experience of lean service in their organisation and how did they find the role of HRM practices to support lean service. They were then invited to reflect on if they were to start with lean all over again, what they would do differently in terms of utilising HRM practices to support lean service in their organisation.

3.7.8 Piloting the interview schedule

The researcher piloted the interview schedule with four participants from FirstService. These interviews were:

- Henry, Operations Manager and Head of Continuous Improvement, FirstService
- Tom, Business and Continuous Improvement Consultant, FirstService
- Sarah, Head of Lean and Continuous Improvement, FirstService
- Zoe, Lean Practitioner, FirstService

These interviews were used for piloting purposes, meaning that they were used to refine the interview schedule and guiding questions. They were also later used as background information.

The rationale for piloting the interview schedule was to determine whether the forthcoming participants would understand the interview questions and whether any of the interview questions needed to be rephrased. Also, the researcher wanted to ascertain if the number of the interview questions was a fit for an hour of interview and whether there was a need to add any additional questions to further explore the phenomenon. Therefore, the information and experience obtained from piloting the interview schedule was subsequently utilised by the researcher to refine the interview questions and make the questions clearer.

3.7.9 Participants’ informed consent

Once the permission of access from an organisation was obtained, the researcher recruited the participants who were willing to take part in the interviews. The participants were normally
recruited through face-to-face discussion, over the phone, email exchanges, Twitter and LinkedIn InMail exchanges. The researcher informed the recruits about the purpose of the study, length of time an interview was expected to take and the informed consent form.

When an interview was conducted, the interviewee was immediately invited to sign the informed consent form (see Appendix III: Informed consent form). The researcher assured the interviewees that their identity is not compromised and that their anonymity is guaranteed.

3.7.10 Sampling strategy
To select the case study organisations, the researcher used purposive sampling (Saunders, Lewis and Thornhill, 2016). Mainly because the researcher wanted to select service organisations that demonstrated the phenomenon of the study (Gray, 2017). To select the participants, the researcher used purposive and snowball sampling (Collis and Hussey, 2013). The main rationale for that was to select knowledgeable informants (Eisenhardt and Graebner, 2007). This section further discusses the sampling strategy of the researcher.

Qualitative research normally utilises a small number of case studies (Gray, 2017). For that reason, the sampling strategy is normally purposive (Gray, 2017). Eisenhardt and Graebner (2007) find that the assumption that purposefully selected case study organisations need to be representative of a population as a wrong assumption. This understanding makes sense especially when a researcher does not attempt to produce statistical generalisation or test a theory. Random sampling better fits statistical generalisation and testing a theory (Collis and Hussey, 2013).

On the other hand, to develop a theory, the existing literature suggests the adoption of theoretical sampling (Saunders, Lewis and Thornhill, 2016). In which a researcher attempts to recruit organisations which are unique or provide theoretical support to explain a phenomenon of interest (Collis and Hussey, 2013). However, this sampling strategy is less effective in elaborating, refining and extending a theory (Gray, 2017).

Because the researcher did not attempt to produce statistical generalisations or test a theory or develop a theory, random sampling or theoretical sampling did not fit the sampling strategy.
of this study. Instead, the researcher aimed to elaborate, refine and extend previous theoretical understanding of utilising HRM practices to support lean practices (Voss, Johnson and Godsell, 2016). And so, since the case selection was not for statistical purposes, random selection was not relevant to select the appropriate case study organisations (Eisenhardt, 1989). Purposive sampling to select the case study organisations was deemed as the most appropriate approach (Gray, 2017).

Consequently, purposive sampling allowed the researcher to select case study organisations that were expected to provide a detailed understanding of the phenomenon of the study (Gray, 2017). It also allowed the researcher to capture multiple and different perspectives of the participants from the purposefully selected case study organisations (Creswell, 2017).

Further, several scholars support the notion that the selection of case study organisation should be based on replication logic and contrary findings (Voss, Tsikriktsis and Frohlich, 2002). This means that the case study organisations should be purposefully selected either to replicate the findings from each other or provide contrasting findings. Eisenhardt (1989) suggests that the case study organisations need to be purposefully selected to make the findings generalizable. Therefore, taken together, the case study organisations in a research inquiry need to generate data that are supportive of one another. In other words, they are expected to produce ‘converging evidence’ (Gray, 2017).

For that reason, the case study organisations that the researcher approached were service organisations that had been deploying lean practices in their organisation to improve service delivery. They were utilising enabling HRM practices to support their lean programmes. They were also located and provided service in the United Kingdom. The selected service organisations were located in the UK, mainly, because lean practices have been widely adopted in the UK (Bhasin, 2010).

Further, it was also crucial for the researcher that the case study organisations had the willingness to work with the researcher, devoted time of their employees for interviewees, allowed the collected data to be used in publications and gave the researcher access to conduct interviews on-site.
On the other hand, to choose the participants, the researcher used purposive and snowball sampling (Collis and Hussey, 2013). Eisenhardt and Graebner (2007) suggest that a researcher should interview knowledgeable informants who are able to offer multi-perspective of a phenomenon of a study. Therefore, the initial interviewees from each case study organisations were purposefully selected. After that, once they were interviewed, they were invited to recommend other members of their organisation whom they thought were knowledgeable informants. As a result, snowball sampling allowed the first cohort of informants to recommend candidates who were familiar with the phenomenon of the study for the next round of interviews (Gray, 2017).

3.7.11 Data collection techniques
To collect the primary data, the researcher used semi-structured interviews, direct observation and documental evidence (Eisenhardt and Graebner, 2007; Yin, 2018). However, the main data collection technique was semi-structured interviews because the researcher wanted to understand opinions, attitudes, experience, practical accounts and recommendation of the participants with regard of how their organisation utilised HRM practices to support lean service (Rowley, 2012). The other data collection techniques were utilised to verify the evidence obtained from the semi-structured interviews and ensure the use of multiple techniques of data collection (i.e. triangulating data from several sources) (Creswell, 2017; Yin, 2018).

3.7.9.1 Semi-structured interviews
Interviews were essential for the researcher to interact with the interviewees to fulfil data collection requirements. For that purpose, the researcher conducted twenty-seven semi-structured interviews with participants who consented to participate from MyFinance, FineBank, Hinance, EastManage and HighEnd. This number does not reflect the piloting interviews and initial interviews with other potential candidates in other service organisations.

‘Interview’ is a significant data collection technique in case study research (Gray, 2017). It is a purposeful conversation between two or among several individuals to discuss a phenomenon of interest (Collis and Hussey, 2013). It allows data to be collected from original sources (Eisenhardt and Graebner, 2007). For that reason, "Interviews are a highly
efficient way to gather rich, empirical data, especially when the phenomenon of interest is highly episodic and infrequent." (Eisenhardt and Graebner, 2007, p. 28)

Yin (2016) advocates the use of interview in case study research because it generates data which is generally guided by the research questions of a study. It is a source of novel insights into a phenomenon. However, interview is disadvantageous if research questions are poorly defined or a researcher is biased towards certain responses or data is not accurately recorded or interviewees are giving the type of responses that pleases a researcher (Yin, 2016).

The researcher used semi-structured interviews. There are three types of interviews: structured, semi-structured and unstructured (Collis and Hussey, 2013). In a semi-structured interview, the researcher produces a protocol of interview questions prior to conducting any interview. The researcher refines the questions as data collection progresses (Collis and Hussey, 2013). The researcher does not necessarily follow a certain order in asking the questions (Collis and Hussey, 2013). As the nature of the research question was exploratory in this study, the features of semi-structured interview made it an appropriate type of interview format in this study.

The researcher conducted twenty-seven semi-structured interviews across the five case study organisations (see Table 6). The participants were from several levels, functions and departments. They were informed that participation was voluntary. The number of the interviews in each case study depended on the level and adequacy of information collected to answer the research question (Saunders and Townsend, 2016).

The interviews were conducted from March to September 2016 (see 3.7.1 Data collection timeline). They took place at multiple venues in the United Kingdom at different dates and times within that period. The duration of the interviews was from forty-five minutes to an hour and ten minutes. They were conducted in complete compliance with the ethical requirements of the Loughborough University. Consent forms of the interviewees were also obtained.

All the interviews (except one) were audio-recorded with the consent of the interviewees. Interviewees were given full control over the use of the recorder. If for any reason, they were not comfortable with recording, they could stop the recording at any time. They were also
fully informed of the verbatim transcripts of the interviews and how the transcripts are used for research and publication.

Digitally (voice) recording interviews has several advantages. It enabled the researcher to record the exact account of the interviews. It increased the attention of the researcher to effectively listen to and engage in the conversations with the participants. It improved the confidence of the researcher in the findings. It provided the researcher with a record of the interviews for further analysis.

On the other hand, digitally (voice) recording interviews could have several disadvantages. It negatively impacts rapport. Recording devices are prone to technical problems and glitches. A researcher by listening to a recorded group interview might be unable to recall the speakers. It also confuses an interviewee between the accounts they want recorded with the actual accounts they want to share with a researcher.

However, the researcher mitigated these disadvantages in this study as follows:

- To avoid digitally (voice) recording interviews negatively impacts the rapport, the researcher explained the reasons of recording the interviews to the interviewees in advance. They were enabled to stop the recording at any time they did not feel comfortable with the recording at their full discretion.
- To avoid technical problems, the researcher used a pair of digital voice recorders.
- The interviews, in this study, were one to ones and the anonymity of the interviewees was prioritised due to ethics requirement.

Furthermore, all the interviews (except one) were fully transcribed by the researcher for analysis (Lapadat and Lindsay, 1999; Bird, 2005). The participants were made aware of their rights to request the verbatim transcript of their interviews to verify how representative the transcripts were of their views. They were also made aware of their rights of withdrawing all or part of the data they had provided to the researcher.

3.7.9.2 Direct observation

The researcher spent time walking around four of the sites of the case study organisations, attended meetings and joined guided tours. In addition, majority of the interviews were
conducted at places on site where the researcher could see the interaction of employees and managers. Field notes were collected during these site visits to serve two purposes: first, to record any interesting impression that emerged during or after a site visit (Collis and Hussey, 2013), second, to corroborate findings from the semi-structured interviews (Eisenhardt and Graebner, 2007; Yin, 2018).

### 3.7.9.3 Documentary evidence

The researcher collected organisational charts, layouts, photos of visual boards, manuals and organisational publications from site visits of the case study organisations. These archival records helped the researcher to deepen his understanding of the lean journey of the organisations and make clear sense of the data provided during the semi-structured interviews.

The researcher also collected letters, lean reports, lean guides and articles of lean journey of the organisations. These documents also provided corroborating evidence to support the findings from the semi-structured interviews. Through documentary evidence, the researcher, for instance, developed an in-depth understanding of the utilisation of recruitment and selection and training and development to support lean practices in Hinance. Accordingly, documentary evidence provided useful insights in terms of the documented utilisation of enabling HRM practices to support lean service in the case study organisations.

Hereafter, several examples are provided of how documentary evidence informed the researcher’s analysis and interpretation of the primary data. There are also examples of the use of documentary evidence in chapter four to support the findings from the interviews (see Figure 57, Figure 64, Figure 65, Figure 76 and Figure 77).

Interviewees frequently cited numerous benefits of lean service deployment in their organisation and the use of several lean tools for that purpose. The benefits included an increase in market share, elimination of waste, improved utilisation of resources, savings, productivity, work-flow and quality and streamlined service processes. One of the lean tools, referenced by the service managers for that purpose, was a 5s tool. Documentary evidence (e.g., Figure 10) allowed the researcher to corroborate the references made in the interviews to lean service benefits and the tools used for that purpose.
Figure 10, for instance, demonstrated that lean tools such as 5S tool was used by the case study organisations such as EastManage. It also supported researcher’s understanding around ‘tailoring lean tools to organisational needs’ in a lean service context. Here, in this excerpt, the choices of colour and icon were also reflective of the nature of the business of EastManage. This excerpt also demonstrated that lean service in EastManage had taken the form of ‘a way of thinking’ rather than a set of tools and techniques. This was clearly helpful to understand the lean abstraction level in the EastManage, for instance (see 2.2.3.6 Lean abstraction levels).

The excerpt also helped the researcher to corroborate the several benefits of lean service suggested in the interviews. It clearly pointed to the improvements in quality and productivity, elimination of waste and better utilisation of resources. An increase from 45%
to 56% of improvements in recycling due to the employment of 5s lean tool also suggested an increase in market share in terms of recycling capacity. This information was utilised, for instance, in section 3.7.5; “Lean practices had enabled the company [EastManage] to significantly increase its recycling rate from 45% to 56% by 2015.”

The researcher categorised the case study organisations according to their place on the S-curve of lean maturity (see 3.7.5 The S-Curve of lean maturity stages). This way the collected data represented each stage of lean maturity. Therefore, knowing the lean maturity stage (Netland and Ferdows, 2016) of a case study organisation was necessary. Although the information on the lean maturity stage of each case study organisation was obtained in the interviews, such information was also corroborated with documentary evidence (e.g., Figure 11).

![Figure 11: Lean maturity stage at FineBank](image)

Figure 11, an excerpt from an internal newsletter of FineBank, provided triangulating data of the advanced stage of lean service deployment at FineBank. It highlighted for the researcher the relatively high-performance level of the bank in terms of employing lean service practices. The excerpt suggested an organisation wide engagement in lean service practices. It was suggestive of the advanced lean maturity stage of FineBank in which a lean culture was in the making and performance targets were continually set higher.
Succession planning (see 4.3.6 Succession planning) was an interesting HRM practice to be utilised by the case study organisations to support lean service. This practice was referenced in several of the interviews. The documentary evidence also had references to such a practice to support lean. Figure 12, for instance, clearly highlighted the significance of such an HRM practice to support lean service, particularly, to prepare successors for members of the improvement action teams such as lean teams (see 4.3.12 Groups and teamwork).

5.3 Replacing team members

It may be necessary to replace team members from time to time – for instance when an internal member leaves the organisation. Any new member needs to receive the same initial development as the rest of the team. Your Quality Centre will be able to advise on this, and may be able to arrange for the new delegate to attend an "open" programme or one being run for another organisation.

Figure 12: Succession planning in HighEnd

The except from the lean manual of HighEnd (Figure 12) helped the researcher to corroborate the findings that suggested members of the lean teams had a successor to occupy their role when these roles were vacated. It also provided further evidence that new candidates to lean teams undergo similar training programmes like their predecessors to have their skills and understanding of lean developed to the level of the peers on the lean teams.

Figure 13: ‘1a’ lean course

Three other documentary excerpts (Figure 13, Figure 14 and Figure 15) from the lean training materials of Hinance, MyFinance and FineBank provided detailed contents of Lean Competency System (LCS) (see 4.3.7 Training). The interviewees frequently referenced ‘1a,
1b, 1c’ lean training courses. However, from the interviews the contents of these lean training courses were less elaborate.

Documentary evidence therefore enabled the researcher to not only corroborate the lean training types referenced in the interviews but also obtain clarity around the contents of these courses across the three organisations.

These excerpts provided the researcher with more details to understand that ‘1a’ lean training course was tailored to teach basics of lean and ‘1b’ was to prepare individuals to a
practitioner level (see 4.3.7 Training). The ‘1c’ excerpt informed the interpretations of the primary data with regard of the depth and breadth of ‘1c’ training course. ‘1c’ was intended to prepare individuals to an advance level of lean understanding and practices (i.e. an expert level). Individuals with a ‘1c’ accreditation served as a train-the-trainer or in lean teams in their organisation (see 4.3.12 Groups and teamwork).

Reward and recognition emerged as one of the recurring themes in the primary data that was collected through interviews. During the interviews, the discussions focused on ‘how’ and ‘why’ this HRM practice was utilised by the case study organisations to support lean service. The interviewees made several references to means by which their organisation was utilising such an HRM practice for that purpose (see 4.3.10 Reward and recognition). One of those means was a ‘Thank you’ letter to encourage lean desired behaviour and outcomes.

6.1 Standard met

If the Managing Assessor finds that the standard continues to be met, he or she will communicate this to the appropriate people within the organisation, and also to the Quality Centre.

It’s a nice touch at this point for a letter of congratulation to be sent out, perhaps by [redacted]

Figure 16: Use of ‘Thank you’ letter

The documentary evidence used to obtain further details of the nature and seriousness of the organisations in promoting recognition as part of the reward and recognition to support lean service. One of such a documentary excerpt is provided in Figure 16 which highlighted for the researcher, in this example, that MyFinance clearly encouraged lean desired behaviour and outcomes through, among others, a ‘Thank you’ letter: ‘a nice touch at this point for a letter of congratulations’ (Figure 16).

Role profiling was a relatively common view amongst the interviewees (see 4.3.2 Role profiling) that their organisation breaks down the job description of a specific role to look at each element of the job description to understand how they add value to the value chain. However, during the interviews, for instance, the step-by-step guide to role profiling was unclear among majority of the interviewees. They seemed to know the existence of such a practice, but they were unable to dictate the steps for that purpose from memory. Excerpts
from the documentary evidence (e.g., Figure 17) provided the researcher with a step-by-step guide of how the case study organisations conducted role profiling to support lean service.

<table>
<thead>
<tr>
<th>Planning</th>
<th>Identifying appropriate methods for evidence collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deciding which people should be included in the review, and selecting a representative sample for interview</td>
</tr>
<tr>
<td></td>
<td>Scheduling and organising the review in advance</td>
</tr>
<tr>
<td>Interviewing</td>
<td>Creating an environment suitable for interviewing</td>
</tr>
<tr>
<td></td>
<td>Effectively introducing the interview</td>
</tr>
<tr>
<td></td>
<td>Framing and posing appropriate questions to obtain information about current practice and performance</td>
</tr>
<tr>
<td></td>
<td>Listening and note-taking</td>
</tr>
<tr>
<td></td>
<td>Developing rapport with interviewees</td>
</tr>
<tr>
<td></td>
<td>Dealing with difficult situations in interviews</td>
</tr>
<tr>
<td></td>
<td>Effectively closing the interview</td>
</tr>
<tr>
<td>Analysing evidence</td>
<td>Accurate recording and cross-referencing of evidence</td>
</tr>
<tr>
<td></td>
<td>Analysing evidence from various different sources</td>
</tr>
<tr>
<td></td>
<td>Reaching sound conclusions about the current status (in relation to the current status) of a department, branch or team</td>
</tr>
<tr>
<td>Giving feedback</td>
<td>Observing confidentiality requirements</td>
</tr>
<tr>
<td></td>
<td>Presenting clear and accurate written reports of findings</td>
</tr>
<tr>
<td></td>
<td>Providing clear and accurate verbal feedback</td>
</tr>
<tr>
<td></td>
<td>Dealing with difficult situations in feedback meetings</td>
</tr>
</tbody>
</table>

*Figure 17: A step-by-step guide to role profiling*

Figure 17, an excerpt from the lean manual of HighEnd, suggested that the case study organisations, and in this example HighEnd, were very thorough in their approach to smoothing tasks and clarify expectations of a new or an existing role to support lean service.

‘Bug boards’ was a recurrently mentioned concept during the discussions on employee voice, particularly in Hinance (see 4.3.11 Employee voice). As the name ‘bug’ from the concept suggests, it sounded like a strange concept. Using prompts during the interviews allowed the researcher to obtain more details of the concept. However, corroborating such detailed account from the interviews was necessary for the researcher to ensure reliability of the findings. Figure 18, a documentary excerpt from ‘A guide to the Lean culture at [Hinance]’ provided the corroborating evidence for the details and existence of such boards to ensure employees’ voice was heard to support lean service.
Documentary evidence of ‘bug boards’ (e.g., Figure 18) provided the researcher with one of the interesting explanations as how ‘employee voice’ was interpreted by the case study organisations. It explained that employee voice could mean capturing employees’ continuous improvement ideas to improve aspects of the workplace in a lean service context (see 4.3.11 Employee voice).

The plan-do-check-act (PDCA) cycle to implement change (Deming, 2000) was also referenced in the documentary evidence that was collected. The case study organisations had a tailored version of the PDCA model to serve their needs. Figure 19 presents one of those excerpts and the wording (see the second line from the top of the figure) clearly suggested that the use of ‘us’ and ‘we’ to refer to Hinance, as an organisation, to reflect a tailored
version of the PDCA. Excerpts such as the one in Figure 19 allowed the researcher to understand lean service planning, provision and monitoring in the case study organisations. It also enabled the researcher to link the utilisation of the HRM practices emerged from the interviews to the PDCA framework (see Figure 80).

![PDCA - Continuous Improvement Cycle](image)

*Figure 19: Employing PDCA in Hinance*

Using documentary evidence, the researcher therefore corroborated the references made to the PDCA during the interviews. The researcher also benefited from the excerpts to use prompts to further understand the link of HRM practices and the PDCA framework.

This section demonstrated how documentary evidence informed the researcher’s analysis and interpretation of the primary data that was collected through the interviews. The selective excerpts were provided along with an explanation of how, for instance, each excerpt informed researcher’s analysis and interpretation of selective points made in the thesis.

### 3.7.12 Data collection challenges

The researcher faced two main challenges during data collection. These were, first, convincing the purposefully selected case study organisations and participants to take part in
the research and, second, managing cancellation and rescheduling of interviews into the timeframe of data collection.

First, the researcher utilised several means to approach the potential contacts and convince them to take part in the study. These included emails, phone calls, organisational LinkedIn page, organisational social networking pages, networking events, public guided tours, networking, University alumni group and research supervisors (see 3.7.3 Negotiating access). The researcher negotiated access to the organisations at two levels:

- At an institutional level: The researcher attempted to obtain access to the organisations by writing, for instance, to public relations department, human resource department, customer service department and secretary of the executive members from the organisations.
- At an individual participant level: The researcher attempted to write directly to potential candidates or candidates recommended through snowball sampling.

Nevertheless, the researcher received several polite refusals and reserved replies from potential contacts. This was challenging because the researcher had to absorb it within the timeframe of the research.

The second challenge was postponement and cancellation of interviews due to time constraints by the prospective interviewees. During the process of data collection from March 2016 to September 2016, the researcher experienced postponement and, on some occasions, cancellations of scheduled interviews. Further, a couple of scheduled interviews never happened despite rescheduling them for several times. Some of the cancellations were just few minutes prior to the time of the scheduled interviews.

However, despite these two challenges, the researcher ensured that the necessary data was obtained from the case study organisations to answer the research question. The time constraints of the participants were fully absorbed through a combination of planning, determination and patience. The researcher also had anticipated such challenges in advance and scheduled data collection over a period. Such flexibility was possible by combining conducting interviews and transcribing them side by side. This arrangement allowed the researcher flexibility to absorb unforeseen changes such as re-arranging interviews.
3.8 Data analysis

Data analysis refers to a set of processing stages by which a researcher explores data and draws and interprets meanings from it (Braun and Clarke, 2013; Bryman and Bell, 2015). And so, it is a diverse, multi-phase and complex process (Holloway and Todres, 2003). Further, data analysis in a qualitative study is linked with the data collection techniques a researcher employs (Saunders, Lewis and Thornhill, 2016). Following this line of thinking, the researcher adopted the analytical schema of ‘description-reduction-interpretation’ (Wolff, 1999).

The initial stage of Wolff’s (1999) analytical schema is ‘description’. To satisfy this stage, the researcher obtained an in-depth ‘description’ of HR-enabled lean service through interviews (supported by direct observation and documental evidence) (see 3.5.2 The choice of case study ). The second stage of the schema is ‘reduction’. To reduce the data, the researcher employed the six phases of thematic analysis proposed by Braun and Clarke (2006). Hence, the data (i.e. the ‘description’) was taken through the six phases of thematic analysis to identify emergent themes and patterns from it. The emergent themes were then presented in Chapter 4: Findings. The final stage of the schema is ‘interpretation’. In this stage, the researcher interpreted themes and explained ‘how’ and ‘why’ they were relevant to HR-enabled lean service. Accordingly, the researcher discussed what the themes signify and how the ‘meanings’ increase our exiting understanding of enabling HRM practices to support lean service in Chapter 5: Discussion.

To generate themes, the researcher had the understanding that thematic analysis was the most appropriate data analysis approach in this study (Braun and Clarke, 2006). Thematic analysis was utilised to identify themes and patterns in the primary data. Overarching themes were generated from the codes following the six phases of thematic analysis proposed by Braun and Clarke (2006) (see Figure 20). In the next two sub-sections, this approach of theming is further discussed and justified.

3.8.1 Employing thematic analysis

Thematic analysis assisted the researcher to identify, analyse and report themes from the primary data. It is a method of data analysis that requires a researcher to search for patterns,
meanings and themes within and across qualitative data (Braun and Clarke, 2006, 2013). It is an iterative process between themes and data, meaning that the analysis process involves a continuous forward and backward movement in searching, refining and reporting themes (Braun and Clarke, 2006, 2013). This section provides further details on thematic analysis employed in this research inquiry.

This study used thematic analysis to reduce the data to themes. In doing so, themes were generated from the primary data following the six phases of thematic analysis proposed by Braun and Clarke (2006) and as illustrated in Figure 20:

As projected by Braun and Clarke (2006), thematic analysis begins with transcribing interviews (i.e. familiarisation with data). Accordingly, the researcher transcribed all the interviews in full and word by word (verbatim). Although transcribing the interviews was an arduous process, it was rewarding. Reading and re-reading the interview transcripts helped the researcher to further understand the data and generate the initial thoughts and codes (Lapadat and Lindsay, 1999; Bird, 2005).

The second stage of thematic analysis is to generate the initial codes. The researcher employed open coding to generate the initial codes (Corbin and Strauss, 2008). Open coding allowed the researcher to attach codes (concepts) to extracts of the data aiming to describe, name, classify and segment extracts of the data into meanings and themes (Corbin and Strauss, 2008).
The third stage is to search for themes within and across the coded data. The researcher recorded and examined themes within the data. These themes were patterns across the datasets (Braun and Clarke, 2006). The researcher pinpointed and recorded themes that were important to describe the enabling HRM practices to support lean service and to answer the main guiding research question of this research inquiry. Following Braun and Clarke (2006), the researcher recorded themes that were frequently emerging from the data such as ‘training’ and themes that were interesting such as ‘succession planning’.

In stage four, the researcher reviewed the themes and looked at how each theme represented the data. In stage five, the researcher refined and defined what the themes meant and how each theme captured aspects of the data in describing the phenomenon of interest in this study. In the final stage, the researcher reported the themes and, at this stage, the significant themes to answer the research question were reported along evidential quotes from the data to support them (see Chapter 4: Findings).

Further, the researcher used NVivo 10 and 11 software packages to assist with all the stages of thematic analysis (Bazeley and Jackson, 2013). The next sub-section explains how NVivo software packages were used for theming.

3.8.2 Theming with NVivo software packages

NVivo is a qualitative data analysis computer software package developed by the QSR International (Bazeley and Jackson, 2013). It provides the tools—and, thus, empowers a researcher—to work with and organise rich and thick qualitative data (Bazeley and Jackson, 2013).

The researcher used NVivo software packages 10 and 11 to work with the data and generate the initial codes, search for themes, review themes, refine themes and extract evidential quotes from the data to support themes. To do that, the four stages of analysing data in NVivo was followed as outlined by Bazeley and Jackson (2013) and illustrated in Figure 21:
In Stage 1, the researcher entered the details of the data analysis project into NVivo. All the relevant data of this thesis was imported into the project to provide the researcher with an overall picture of the data analysis. The details mainly included: sources of data (internal and external) and attributes, values and classifications (see Figure 22 and Figure 29).
The data sources were entered into the section of the programme labelled as ‘Sources’ which, as the Figure 22 displays, has sub-sections of ‘Internals’, ‘Externals’, ‘Memos’ and ‘Framework Matrices’. ‘Internals’ were the sources of materials and data that the researcher imported and created in NVivo—including combinations of MS Word documents, PDFs, audio and pictures. The internal sources included the interview transcripts, observation notes and documents (see Figure 22 and Figure 23).

![Figure 23: 'Internals' (interview transcripts) screen snip](image)

‘Externals’ represented the research materials that the researcher were unable to import into NVivo such as copyright materials. The researcher using ‘Externals’ created links to such external source materials to locate them and summarise relevant contents. The external sources (see Figure 24) included relevant links to sources of information from the case study organisations’ main website and other relevant websites.

![Figure 24: Sample of 'Externals' (website link of case studies)](image)
‘Memos’ (see Figure 26) were the type of documents that enabled the researcher to record interesting ideas, emerging insights, interpretations or growing understanding of the source materials throughout the analysis process. They provided the researcher with a way to keep analysis separate from (but linked to) the source materials that were analysed (Bryman and Bell, 2015).

Some of the memos gradually evolved into an important part of the 'writing up' stage of the thesis (see Figure 26). Therefore, they worked as containers and served as means to store all the ideas and reflections that later helped the researcher to write the Findings and Discussion chapters of the thesis.

‘Framework Matrices’ (see Figure 27) allowed the researcher to summarise and condense the source materials in the form of tables that had rows for case nodes (e.g., interviewees) and
columns for theme nodes (e.g., HRM practices). Each cell in a table represented the intersection of a case node and a theme. These matrices therefore enabled the researcher to view everything about a theme and how different themes were related to each other and to an individual case node (Edhlund, 2011).

Figure 27: Sample of ‘Framework Matrices’

Figure 28, for instance, displays that the researcher created a framework matrix to summarise the responses of the interviewees about utilising the HRM practice of employee involvement to support lean service. The screen snip shows the several evidential quotes from the interview with Forza, a transformation manager, with regard of the use of employee involvement to support lean service at HighEnd.

Figure 28: Screen snip of employee involvement framework matrix
On the other hand, the attributes, values and classifications corresponding to descriptive information about the data sources, informants, places, case study organisations were also included in the data analysis project. ‘Attributes’ denote “characteristics or properties of a source item or a node which has or will have an impact when analysing data” (Edhlund, 2011, p. 123). Figure 29, for instance, suggests that the researcher recorded attributes such as ‘(SIC) 2007’ for the case study organisations and ‘Position’ for the interviewees.

These attributes allowed the researcher, for instance, understand the nature of the service of the case study organisations and the position of responsibility of the interviewees. Therefore, the descriptive information included in the classifications (e.g., Figure 29) allowed the researcher to gain more insights into the data.

Figure 29: Classifications screen snip
In Stage 2, the researcher commenced the abstraction of the obvious topics and themes from the transcripts (see Figure 30).

![Figure 30: Sample of the formulation of nodes to create potential themes](image)

Coding in NVivo (Figure 31) required the researcher to assign labels to excerpts of the data to generate the initial codes. The process of coding allowed the researcher to group related concepts (labelled in the programme as ‘Nodes’) to find obvious themes from the initial codes.

![Figure 31: Sample of coding in NVivo](image)

Allocating coding stripes and highlighting certain phrases and sentences denoted the obvious topics that originated from the formulation of nodes to create potential themes. Coding stripes
are located on the side of each transcript in the programme and, when double clicked, a docked window open and highlight the exact text to which they are related.

In Stage 3, the researcher utilised NVivo for higher levels of analysis such as creating Node Matrices (see Figure 32), generating models and relationships and running single and cross-case queries (see Figure 33).

The researcher explored more complex aspects of the data (Bryman and Bell, 2015). The nodes were moved, merged and renamed into enabling HRM practices. Nodes were then renamed and merged into a hierarchical arrangement to allow greater analytical coding using queries (Edhlund, 2011).

In Stage 4, the researcher produced the overarching themes and drew conclusions by reviewing, refining and verifying the potential themes. The analysis continued to continue verifying the conclusions until the data collection was finalised (Miles and Huberman, 1994).
NVivo assisted the researcher in organising the data analysis into ‘Reports’ (Edhlund, 2011) so that the researcher check the conclusions against the data for thoroughness and accuracy. ‘Reports’ (see Figure 34 and Figure 35) contained information about the data analysis project. The researcher used ‘Reports’ to view aspects of the data analysis and review the content. ‘Reports’ therefore allowed the researcher to control over the content or appearance of the necessary and required reports.

In this section, screen snips from the data analysis project have demonstrated that the researcher used NVivo to conduct a thorough data analysis. Bryman and Bell (2015) state that robust qualitative data analysis depends on the rigour and thoroughness of data analysis. NVivo software package is therefore designed to give, for instance, the researcher such tools to rigorously and thoroughly analyse the collected data in this thesis (O’Neill, 2013). However, when the researcher used NVivo to assist with data analysis, some concerns were raised. Such concerns are discussed below. While the researcher accepted them, they were
typical for all computer-assisted qualitative data analysis software (CAQDAS) (Bryman and Bell, 2015). The researcher took steps to neutralise these concerns in this study. Further, the advantages of utilising NVivo to assist with data analysis also outweighed the concerns in this research inquiry (Bazeley and Jackson, 2013).

One concern was that the use of NVivo software package might encourage the researcher to follow a strict and rigid process. A rigid process might be deterministic and encourage the researcher to miss some interesting themes when such themes do not fall within the rigid process. On the contrary, because data analysis did not start with a pre-defined strict and rigid process in this research inquiry, the researcher had the flexibility to analyse, record and examine emerging themes. Therefore, all the relevant themes in the data from the perspective of the researcher were recorded and reported.

Another concern was that the use of the software might encourage the researcher to spend plenty of time on coding and re-coding without spending much time on reflecting on the codes to generate themes. The understanding behind this concern was that, using the software, the researcher finds it easy to code and re-code data. Therefore, the use of the software encourages more time to be spent on coding than theming. To address the second concern, the researcher—while utilising time management skills to manage time between coding and reflecting on the codes—allowed sufficient time for generating themes (see Table 10).

Further, another concern was that it is easy to retrieve extracts of data when using the software. And so, the researcher might be tempted to search keywords instead of reading and re-reading the interview transcripts to make sense of the data. This concern was not applicable to this thesis as the researcher single-handedly transcribed all the interviews verbatim. Verbatim transcription allowed the researcher to read and re-read the transcripts several times (see Phase 1: familiarisation with data).

One more concern was that using NVivo encourages the researcher to capture breadth of data analysis rather depth of meaning from the data. Consequently, the researcher might make less sense of the data and the analysis and interpretation might not be adequate. So, this might also distract the researcher from the real work of data analysis. In this thesis, conducting the
interviews and familiarity with the interview transcripts allowed the researcher to not only capture the breadth of the themes but also the depth of the themes.

The last concern was that learning how to use NVivo takes time and the license of the software package is expensive. This concern was also dealt with. The researcher attended a two-day workshop (that was organised by The QSR International and funded by Loughborough University) on how to use NVivo. The researcher learned to competently use the software to analyse data. Besides, the license of the software package was provided to the researcher as part of the researcher’s university subscriptions.

On the other hand, the use of NVivo software package had several advantages. It created a clear track of analysis and, thus, allowed the researcher to be explicit and reflective on data analysis (O’Neill, 2013). Consequently, its use not only increased transparency in the process of data analysis but also provided new opportunities for data analysis through the various tools that it provided the researcher (O’Neill, 2013). As a result, the use of the software packages saved time on data analysis and helped the researcher to efficiently organise the huge amount of qualitative data obtained for the study. It provided the researcher with flexibility to go back and forth throughout the phases of defining themes to refining themes and reporting and supporting them with extracts of the data. It also freed the researcher from clerical tasks such as organising data and made the coding process a pleasant experience.

Other major advantages of utilising NVivo software package were to (i) transcribe interviews, (ii) store transcribed interviews and encrypt them, (iii) write and edit data swiftly in a user-friendly environment, (iv) colour code data and keywords, (v) link related excerpts and extracts of data to nodes, (vi) search and retrieve data, (vii) add and edit memos and record reflections, (viii) display abridged and portions of data and (ix) create models to illustrate the overarching themes.

Taken together, NVivo not only was a helpful tool with theming but also a necessary tool to recall extracts of data, link and map codes and themes, run queries, write memos and annotate PDF documents.
3.8.3 Phases of thematic analysis

The role of a researcher in searching, finding, analysing, refining and reporting themes in thematic analysis is well-acknowledged (Braun and Clarke, 2006). Accordingly, what constitutes a theme is eventually the result of a researcher’s decision. However, thematic analysis needs to follow a systematic process. For that reason, Braun and Clarke (2006) provide guidelines for conducting a rigorous thematic analysis, organised around a six-phase process (see Figure 21). What comes next explains how the researcher followed the six phases of thematic analysis as proposed by Braun and Clarke (2006) to generate themes in this research inquiry.

Phase 1: familiarisation with data

The first phase of thematic analysis was transcribing the audio files of the interviews (Braun and Clarke, 2006, 2013). As suggested by Lapadat and Lindsay (1999), the researcher took an active role in the transcription process (see Figure 36), meaning that the researcher single-handedly transcribed the interviews and reviewed the transcripts (i.e. transcription was not outsourced).

Figure 36: Screen snip of interview transcript with Andy, Head of Asset Management, at EastManage

This process was rewarding. The researcher had the opportunity to read and re-read the interview transcripts to make sense of the data and produce the initial thoughts (Braun and Clarke, 2006, 2013). The verbatim transcripts of the interviews therefore were vital. This
process helped the researcher to engage with the transcripts, produce initial codes and, thus, become familiar with the data (e.g., see Figure 37).

The transcription process spanned over nine months. During which period, the researcher continuously re-engaged with the produced transcripts. Each hour of interview, on average, took a minimum of 8-10 hours to transcribe. The transcription process yielded a total of more than 400 one-side A4 pages of textual data (see Figure 38). The researcher further familiarised with the data after importing the produced transcripts into NVivo workspace (see Figure 23). This process provided the researcher with an opportunity of repeated reading of the transcripts. It also helped the researcher to cross-check the transcripts against the audio files for exactness and accuracy of the transcripts.
Phase 2: generating initial codes

The second phase of thematic analysis was to generate the initial codes (Braun and Clarke, 2006, 2013). Once the interview transcripts were imported into NVivo workspace, the researcher, then, coded the interview transcripts (see Figure 39).

Codes were applied to interview excerpts merely to verbal content. Figure 40, for instance, illustrates that the researcher applied two codes to an excerpt of the interview with a Lead.
Lean Consultant, David, at MyFinance. They were ‘Working through teams’ and ‘To harvest good ideas’ to the excerpt: “how do I harness my team who know the business, know the process, know the product, how can I engage them, so they continue the way they're looking at how they can improve the day to day.” (David, Lead Lean Consultant, MyFinance) The codes therefore were applied merely to the verbal content of the excerpt (Braun and Clarke, 2006).

In this phase, the researcher applied codes to each individual interview with no formal attempts to identify themes recurring across the data (see Figure 41).
Phase 3: searching for themes

There is no consensus of what constitutes a theme in the existing literature (Braun and Clarke, 2006). However, two concepts are prevalent in deciding what should be considered a theme: recurrence and importance (Buetow, 2010). For that purpose, Braun and Clark (2006, 2013) emphasize the role of a researcher’s judgement in defining themes. They suggest that a researcher be flexible and consistent throughout data analysis.

Following this line of thinking, once the interviews were coded, the researcher began to search for themes within individual interviews and across the data (see Figure 42).
This involved identifying patterns and similarities from the coded extracts of transcripts. After several cycles of searching for themes, the researcher brought the coded extracts from all the interviews together and organised them into overarching themes.

Figure 43: Collecting coded extracts and searching for themes

Figure 43, for instance, illustrates that the researcher collected the excerpts about verbal communication to support lean service under ‘face to face’ node. ‘Face to face’ served as one of the communications channels across the case study organisations to enable employees to have a say on lean service in their organisation. Along with other channels (such as ‘App’ and ‘Audio’), ‘face to face’ was organised into the overarching theme of ‘Employee communication’.

Themes, in this context, symbolized units of analysis that provided answers to the research questions of the study (Braun and Clarke, 2006, 2013). Each theme captured something essential about the data in relation to the research questions and represented a patterned response or meaning within the data (Braun and Clarke, 2006, 2013). The researcher took an inductive approach for theming, meaning that the identified themes were strongly linked to the data and not driven by the existing theoretical understanding (Braun and Clarke, 2006, 2013). Accordingly, inductive exploration allowed the researcher to code the data without attempting to reduce them into pre-existing coding frames and templates (see Figure 43).
Phase 4: reviewing themes

The researcher approached this phase in two ways. First, he reviewed all the initial codes, the coded extracts of the data and the initial themes. For that purpose, matrices (see Figure 44 and Figure 45) were created for the coded extracts of the data and the themes.

Second, he revised all the themes in terms of depth and breadth in the context of the data (see Figure 45). The aim of the researcher, in this phase, was to produce a pool of themes and subthemes that represented the data and answered the research question.
Phase 5: refining and defining themes

To refine the themes, the researcher referred to the data extracts for each theme and collated them under each theme node in NVivo project (see Figure 44). The researcher also revisited the definition of each theme and node description in NVivo (see Figure 46) to prepare the narrative account for the next phase of thematic analysis (i.e. reporting). Collating data extracts under each theme node allowed the researcher to gain an enhanced finish of essence for each theme and consequently to define it more clearly.

After that, the data extracts were organised into subthemes. The subthemes were also defined and labelled clearly. Therefore, in this phase, the researcher generated the overarching themes (see Figure 47).
Phase 6: reporting and supporting themes with data

The researcher had a set of overarching themes from the data to report in this phase (see Figure 47). These themes were supported with selective, compelling and vivid extracts from the data (see Figure 48). To achieve internal consistency of interpretations, the researcher used quotes from the interviews to discuss the themes and to answer the research questions of the study (see Figure 48).
Hereafter, in this phase, the researcher related the themes back to the research questions of the study and the data and supplemented them with evidential quotes to report them in the form of a scholarly analysis of findings (see Chapter 4: Findings).

3.8.4 Rigour in thematic analysis: a 15-point checklist

To improve rigour in thematic analysis, Braun and Clarke (2006) suggest a 15-point checklist for ‘good’ thematic analysis. This checklist (see Table 10) guided the researcher in terms of rigour along the analysis process from familiarisation with the data to reporting the themes.

<table>
<thead>
<tr>
<th>Process</th>
<th>#</th>
<th>Criteria</th>
<th>Status</th>
<th>Criteria met through</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcription</td>
<td>1</td>
<td>The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for ‘accuracy’.</td>
<td>✓</td>
<td>The researcher transcribed all the interviews and conducted triple checks of all the transcripts against the audio files.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Each data item has been given equal attention in the coding process.</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---------------------------------------------------------------------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td><strong>Initial coding</strong></td>
<td></td>
<td>The researcher coded each interview separately and on different days. This allowed the researcher plenty of time to assimilate and reflect between each stage of analysis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>All relevant extracts for all/each theme have been collated.</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Themes have been checked against each other and back to the original data set.</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Themes are internally coherent, consistent, and distinctive.</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Every theme is fully versed in the data. The researcher, often, has supported every theme with three extracts from the data (see Chapter 4: Findings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The researcher collated all the relevant extracts for each theme in a standalone node in an NVivo project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The researcher checked and rechecked the themes against each other to avoid duplication of themes and against the data set for accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The researcher used the research question as a guidance to check and re-check the themes against the data set for coherence, consistency and distinctiveness of the themes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Data have been analysed - interpreted, made sense of - rather than just paraphrased or described.</td>
<td>✓</td>
<td>In Chapter 4, the researcher has made sense of the data and analysed it under each theme. In Chapter 5, the researcher has interpreted what the findings (themes) mean when the existing literature is in perspective.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Analysis and data match each other - the extracts illustrate the analytic claims.</td>
<td>✓</td>
<td>The understanding of the researcher of data analysis was that it is an iterative process. Thus, the process involved continuous back and forth movements between the themes, coded extracts and the data set.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Analysis tells a convincing and well-organized story about the data and topic.</td>
<td>✓</td>
<td>Details of the analysis and interpretation of the data are included in Chapter 4 and Chapter 5 of the thesis.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>A good balance between analytic narrative and illustrative extracts is provided.</td>
<td>✓</td>
<td>In Chapter 4, the researcher analysed and supported the themes with evidential quotes from the data. He also explained what the findings mean. In Chapter 5, the researcher interpreted what the findings (in Chapter 4) mean in the context of the literature and how the findings contribute to our existing understanding (in Chapter 6).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.</td>
<td>√</td>
<td>The researcher allocated plenty of time for analysis that spanned from April 2016 to February 2017. Initial analysis was conducted along the process of data collection. Later analysis was an iterative process meaning that the researcher was back and forth between the themes and the data when writing up.</td>
<td></td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>The assumptions about, and specific approach to, thematic analysis is clearly explicated.</td>
<td>√</td>
<td>The researcher had clearly demonstrated his approach to thematic analysis (see 3.8 Data analysis).</td>
<td></td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>There is a good fit between what you claim you do, and what you show you have done - i.e., described method and reported analysis are consistent.</td>
<td>√</td>
<td>The researcher continuously reflected and recorded thoughts on the research design as the data collection and analysis progressed.</td>
<td></td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>The language and concepts used in the report are consistent with the epistemological position of the analysis.</td>
<td>√</td>
<td>The aim of the study was to explore the phenomenon of the study. The epistemological position of the researcher was interpretivism. For that reason, the use of language during the data collection stage was to explore the phenomenon of the study and during the data analysis stage was to interpret and make sense of the findings.</td>
<td></td>
</tr>
</tbody>
</table>
The researcher is positioned as active in the research process; themes do not just ‘emerge’.

The researcher acknowledged his position in the research process of this study in Chapter 3. The researcher took an active role in the process of data collection, analysis and the interpretation of the findings by continuously reflecting along the research process.

3.9 Reliability and validity

This section explains the research quality criteria employed during the research design to ensure reliability and validity. The criteria used to ensure research quality were identified from the existing literature (e.g., Miles and Huberman, 1994; Gomm, Hammersley and Foster, 2000; Voss, Tsikriktsis and Frohlich, 2002; Yin, 2009).

There seems to be a perception that “Making qualitative data is ridiculously easy.” (Richards, 2009, p. 33) The researcher agrees with this statement if qualitative data is generated without a specific purpose and does not answer a specific research question. However, the researcher specifically collected useful, valuable and relevant data to answer specific research questions in this research inquiry (see 3.5.1 The nature of the research question). Consequently, the challenge of data collection for the researcher was to generate useful, valuable and relevant qualitative data (Richards, 2009). To overcome this challenge, as the first step, the researcher ensured that there was consistency, compatibility and integrity between the research paradigm, questions and method (Punch, 2014).

The researcher also needed to show awareness of issues such as, mainly, reliability and validity, ascending during data collection or after such data is collected. “Reliability is concerned with the question of whether the results of a study are repeatable.” (Bryman, 2012, p. 46) On the other hand, “Validity is concerned with the integrity of the conclusions that are generated from a piece of research.” (Bryman, 2012, p. 47) However, in a qualitative research, these concepts usually adopt other meanings i.e. meanings different from the ones in a quantitative approach. For instance, Bryman (2012) suggests that reliability and validity
in a qualitative research denote the internal and external criteria of qualitative data. Reliability, as an internal criterion of qualitative data, therefore refers to accuracy, comprehensiveness and thoroughness of data (Bryman, 2012). Whereas validity, as an external criterion of qualitative data, denotes whether the findings from qualitative data can be generalised beyond the specific context of a qualitative research (Bryman, 2012).

In line with this discussion and following Yin (2009), Table 11 displays how reliability and validity criteria are integrated in the research design of this thesis and the tactics the researcher employed to ensure the findings are reliable and valid.

First, to ensure reliability, the researcher designed a case study protocol and developed a case study database. This way the data collection procedure was similarly repeated across five case study organisations. Further, the detailed description of the research design in this thesis allows another investigator to repeat the data collection procedure to collect similar data to obtain similar findings (Yin, 2009). Therefore, the case study database, case profiles, interview protocol, interview guiding questions and lean maturity stages of the case studies were developed to ensure reliability of the findings in this thesis.

Second, to ensure construct validity, the researcher employed triangulation at a data collection level. The research design chapter provides details of the several data collection techniques used to collect data which included interviews, observation and documentary

<table>
<thead>
<tr>
<th>TESTS</th>
<th>Case Study Tactic</th>
<th>which tactic occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>• use multiple sources of evidence • establish chain of evidence • have key informants review draft case study report</td>
<td>data collection data collection composition data analysis data analysis data analysis data analysis</td>
</tr>
<tr>
<td>Internal validity</td>
<td>• do pattern matching • do explanation building • address rival explanations • use logic models</td>
<td>data analysis data analysis data analysis data analysis</td>
</tr>
<tr>
<td>External validity</td>
<td>• use theory in single-case studies • use replication logic in multiple-case studies</td>
<td>research design research design</td>
</tr>
<tr>
<td>Reliability</td>
<td>• use case study protocol • develop case study database</td>
<td>data collection data collection</td>
</tr>
</tbody>
</table>
evidence. The researcher used semi-structured interviews with senior/middle management, service managers and shop-floor teams of the case study organisations to collect the primary data. This data was then triangulated with non-participant observation during site visits and documentary evidence. The researcher also obtained consent form from the interviewees on the contents created through the interview process.

Third, the researcher did not consider the internal validity in this thesis. This is due the exploratory nature of the research questions and the study. This thesis, unlike an explanatory case study, does not attempt to establish causal relationships between variables.

Fourth, to ensure external validity—generalisation of the findings beyond the immediate case studies (Yin, 2009) — the researcher employed replication logic to confirm similar themes (literal replication) or dichotomous results (theoretical replication) across the case study organisations (Voss, Tsikriktsis and Frohlich, 2002). Therefore, the case study research focused on analytical/theoretical generalization to generalize a particular set of findings to a broader theory (Gomm, Hammersley and Foster, 2000).

3.10 Summary of chapter
This chapter has explained the research design and justified the researcher’s choices. It has clarified the philosophical underpinnings for the approach taken and in conducting this research inquiry. It has also explained and justified that an inductive qualitative case study is adopted in this research. Additionally, data collection and analysis have been discussed thoroughly along with a description of the case study organisations.

In the next chapter, the researcher reports the findings (i.e. theming by looking for enabling HRM practices). Evidence for each theme is presented in the form of data extracts (quotes) from individual interview transcripts. In doing so, the researcher attempts to strengthen the transparency and validity of the findings.
Chapter 4: Findings

This chapter presents the analysis and interpretation of the data. First, it revisits the research question. After that, it presents the definition of the key terminologies, concepts and themes referred to in this chapter. Next, it delves into the analysis and interpretation of the data to answer the research question. By employing thematic analysis, it discusses the eighteen themes that have been drawn from the data. In the remainder of the chapter, evidential quotes from the data are provided to support, explain and justify these themes. Prior to the end of the chapter, a specific bundle of enabling HRM practices is proposed to support lean service. The chapter ends with a summary of the findings.

Chapter outline

4.1 Introduction ........................................................................................................ 160
4.2 Research focus revisited..................................................................................... 160
4.3 Themes from the data.......................................................................................... 160
  4.3.1 Recruitment and selection ........................................................................... 164
  4.3.2 Role profiling .............................................................................................. 169
  4.3.3 Capacity planning ....................................................................................... 173
  4.3.4 Absence management ................................................................................ 176
  4.3.5 Retention and release ............................................................................... 180
  4.3.6 Succession planning .................................................................................. 183
  4.3.7 Training ...................................................................................................... 186
  4.3.8 Career development ................................................................................... 192
  4.3.9 Performance management ......................................................................... 194
  4.3.10 Reward and recognition ......................................................................... 197
  4.3.11 Employee voice ....................................................................................... 201
  4.3.12 Groups and teamwork ............................................................................ 204
  4.3.13 Employee communication and collaboration ........................................... 209
  4.3.14 Labour relations ..................................................................................... 218
  4.3.15 Employee motivation ............................................................................... 222
  4.3.16 Employee involvement ............................................................................ 224
  4.3.17 Employee empowerment .......................................................................... 228
  4.3.18 Employee health and safety .................................................................... 232
4.4 Summary of chapter ......................................................................................... 236
4.1 Introduction
By employing thematic analysis, eighteen themes were drawn from the data when searching for enabling HRM practices to support lean service. These themes, discussed hereafter, illustrate the vital role that HRM practices play in managing and orienting employees to support lean practices in service organisations. While these findings increase our existing understanding of a lean-specific HRM bundle, they allow service organisations to encourage their employees to engage in lean practices.

4.2 Research focus revisited
Chapter 2 (literature review) acknowledged that there is a limited understanding around enabling HRM practices to support lean service. Several issues of the existing literature were identified such as people generally are treated as stable and static beings, lack of consensus on the lean relevant HRM practices, lack of contextual and real-world understanding of how and why HRM practices are utilised and limited interpretation of the literature in the service sector.

4.3 Themes from the data
The analysis exemplifies the crucial role that HRM practices play in orienting employees to support lean practices. A set of 18 enabling HRM practices, which support lean service, emerged as a result of rigorous thematic analysis. These practices led to the development of a specific HRM bundle which is associated with the PDCA framework. These practices are included in this section and discussed in the rest of this chapter with evidential quotes from the data.

Lean service requires several changes to the day to day work of service organisations. These changes are mainly tweaks in the employee behaviour and/or way of thinking (Sparrow, Hird and Cooper, 2014). To operationalise these changes, service organisations need to orient their employees to buy-in to them without forcing the changes. As one interviewee commented:

if you just try to force the change, it is likely to unravel. (Natalie, Operations Manager, MyFinance)

Therefore, forced changes to day to day work do not sustain. A common view amongst the interviewees was that lean service without proper utilisation of HRM practices jeopardises lean journey. For that reason, the interviewees consistently confirmed the vital role of
utilising HRM practices to support lean practices. For instance, when Sue, a Design and Delivery Agent in the central lean team of FineBank, was asked on how she views the role of utilising HRM practices to support lean practices; she, emphatically, said:

God! Hugely, hugely! What we generally find when we are going to businesses [different departments at FineBank] who haven’t had lean … is that they don’t really understand what are the important things that there should be included in people management.

Another interviewee, who reflected on his personal experience of deploying lean practices in EastManage, suggested that ‘80%’ of the time they spent on lean service was wasted with employees who did not buy-in to lean ways of service delivery:

We’ve got the other guys, the sort of detractors, who say, you know, well, we’ve always doing it like this. It’s always worked okay. Why do we need to change? I have to say that we’ve probably spent 80% of the time with minority of the people that don’t buy-in to it. (Philip, Plant Manager, EastManage)

Talking about this issue, another interviewee said:

I think the biggest issue is getting everyone involved, getting an understanding for everybody. (Andy, Head of Asset Management, EastManage)

These evidential quotes illustrate the criticality of HRM practices in lean service. Although the figure ‘80%’ reflects the personal projection of Philip at EastManage, it symbolises the precious (time) resources wasted on employees who do not endorse lean practices (employees that Philip referred to as ‘detractors’).

Nevertheless, the case study organisations utilised several HRM practices to improve the buy-in of their employees to lean service (see Table 12). Utilising thematic analysis (see 3.8.1 Employing thematic analysis), analysis of the data—theming when looking for enabling HRM practices—resulted in the identification of the 18 HRM practices in Figure 49.
These practices (i.e. the overarching themes which lead to the practices) constitute the relevant enabling HRM practices to support lean service. They are the key practices that the case study organisations used to orient their employees towards lean service and obtain their buy-in to lean practices. One informant reported that:

they [lean and HRM practices] are so inherently intertwined. You cannot deliver an effective lean implementation without really, really strong core of effective people management. (David, Lead Lean Consultant, MyFinance)

Consequently, the themes, together, form a list of the ‘effective people management’ practices that supports lean service. Another interviewee alluded to the notion of ‘effective people management’ by stating that:

people management is a key pillar of any lean programme …without engaging our colleagues, we fall short of successfully implementing and sustaining any lean lead change.’ (Amy, Change Manager, HighEnd)

---

**Figure 49: Enabling HRM practices that support lean service**

<table>
<thead>
<tr>
<th>Enabling HRM practices that support lean service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recruitment and selection</td>
</tr>
<tr>
<td>2. Role profiling</td>
</tr>
<tr>
<td>3. Capacity planning</td>
</tr>
<tr>
<td>4. Absence management</td>
</tr>
<tr>
<td>5. Succession planning</td>
</tr>
<tr>
<td>6. Retention and release</td>
</tr>
<tr>
<td>7. Training</td>
</tr>
<tr>
<td>8. Career development</td>
</tr>
<tr>
<td>9. Performance management</td>
</tr>
<tr>
<td>10. Reward and recognition</td>
</tr>
<tr>
<td>11. Groups and teamwork</td>
</tr>
<tr>
<td>12. Employee voice</td>
</tr>
<tr>
<td>13. Employee communication and collaboration</td>
</tr>
<tr>
<td>14. Labour relations</td>
</tr>
<tr>
<td>15. Employee motivation</td>
</tr>
<tr>
<td>16. Employee involvement</td>
</tr>
<tr>
<td>17. Employee empowerment</td>
</tr>
<tr>
<td>18. Employee health and safety</td>
</tr>
</tbody>
</table>
It can therefore be assumed that the lean relevant HRM practices not only bring ‘detractors’ on board to endorse changes that result from adopting lean principles but also allow service organisations to recognise employees who become lean champions. They enable service organisations to orient and engage their employees in deploying lean practices and sustain these practices.

Table 12: Utilising HRM practices to support lean service in the case study organisations

<table>
<thead>
<tr>
<th>HRM practice</th>
<th>High End</th>
<th>East Manage</th>
<th>Hinance</th>
<th>Fine Bank</th>
<th>My Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment and selection</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Role profiling</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Capacity planning</td>
<td>-</td>
<td>-</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Absence management</td>
<td>√</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Retention and release</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Succession planning</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Training and development</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Career development</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Performance management</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Reward and recognition</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Groups and teamwork</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee voice</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee communication and collaboration</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Labour relations</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee motivation</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee involvement</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee empowerment</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Employee health and safety</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

However, it is important to bear in mind that the organisations were representing various stages of lean maturity (see 3.7.5 The S-Curve of lean maturity stages). It was not expected for all to have been utilising the same HRM practices to support lean service. On the
contrary, as Table 12 displays, majority of the proposed HRM practices were utilised by the organisations to support lean regardless of their lean maturity stage. The rest of this chapter discusses each one of these HRM practices (themes) with references to evidential quotes from the data.

4.3.1 Recruitment and selection

Recruitment and selection is utilised to attract, select, appoint and orient candidates with lean knowledge, skills and experience to fill support, managerial and lean-related vacant positions (see Figure 50). While this practice is utilised differently for different roles, preferences are usually given to candidates with prior knowledge and experience of lean (especially if these two are coupled with attitude, behaviour and technical knowledge). Though a candidate with a strong technical background, who lacks lean knowledge and experience, is normally enrolled in lean awareness training sessions or provided with a lean booklet (as part of induction). The data also suggests that expectations are changing in the longer run. As panel members of the recruitment and selection across the organisations under-go lean training programmes—and lean way of service delivery becomes 'business as usual'—their expectations might gradually change towards recruiting and selecting only candidates with strong technical background and prior knowledge and experience of lean practices.

Recruitment and selection is a recurrent theme in the data. It refers to the overall process and activities of attracting, selecting, appointing and orienting suitable candidates to fill vacant positions.
positions in the case study organisations to support lean practices. While it was simplified, it was also thorough in the organisations. It was used as a vehicle to obtain an in-depth understanding of new recruits. For example, one interviewee said:

... the recruitment process is now much more in-depth and assessment of the capabilities is over full-day ... people are going through a number of variety of tasks which are all oriented at a customer ... it is so much more robust way of recruiting people to make sure you get what you're looking for ... more than just the technical capability. (Paul, Managing Consultant, MyFinance)

This practice, prior to employing lean principles, was centrally managed by the HRM department in the head office of MyFinance and HighEnd. However, now, is heavily devolved to line managers. The evidential quote below, for instance, supports this understanding:

... previously, everything was done by head office [HRM central office]. But now ... the manager that is doing the recruiting has got to do the selection process ... (James, CI Lead, HighEnd)

Subsequently, direct line managers and team leaders, in the case study organisations, were heavily involved in the recruitment and selection process. They were responsible to decide about the type of candidates they find suitable for their teams. Because of that, recruitment and selection process benefited from their intake of lean knowledge and experience. For example, one interviewee said:

... individuals, who have gone through, say, a lean intervention, ... are thinking differently about the people that they recruit. (David, Lead Lean Consultant, MyFinance)

The rationale is that since line managers are responsible to embed lean practices in their area of work and sustain such practices, they are vested to utilise recruitment and selection, when they need a new addition to their teams, to recruit candidates who endorse lean ways of thinking.

Another possible explanation is that line managers are equipped with lean tools and techniques, such as performance charts. They are enabled to pick poor performance among their teams. Accordingly, they understand that recruiting poor performers create waste for their organisation. For that reason, devolving recruitment and selection to them better supports the internalisation of lean practices. They can make a better decision in terms of the type of candidates who exactly match their needs. And so, the responsibility of recruiting ‘good’ performers is passed onto line managers to support lean service. For example, one interviewee said:
They [line managers] pick up poor performers which then leads back to … Am I recruiting the right people? … [Therefore,] people have a greater appreciation of the importance of getting the right people to achieve … a quality output … within a timely manner … (David, Lead Lean Consultant, MyFinance)

However, opinions differed as to whether recruitment and selection should equally be utilised for non-managerial and managerial roles to support lean practices. The data suggests that candidates with prior exposure to lean are usually given advantage. Nevertheless, prior exposure to lean does not outweigh the technical knowledge, attitude and behaviour of a candidate for managerial and non-managerial roles.

Furthermore, the findings suggest that recruitment and selection is well utilised when the case study organisations recruit for managerial and lean roles. For example, one of the informants commented:

Dependant on the role which is being recruited to … if the role is specifically for lean improvement … it very much is focused on this skillset … (Amy, Change Manager, HighEnd)

For non-managerial and support roles—roles fall below managerial and team leader—recruitment and selection is less utilised to support lean practices. This means that lean elements could be incorporated in job adverts and panel members on recruitment and selection panels could ask questions to check prior exposure of a candidate to lean. The quote below illustrates that:

I don't think it's mandatory. But I think we do mention a sort of … lean understanding, like experience is certainly preferable. (Frank, Lean Leader, FineBank)

A possible explanation for this might be that preference is given to behaviour, attitude and technical knowledge of a candidate more than lean knowledge and exposure to lean when recruiting for non-managerial roles. As one interviewee put it:

… it's probably 90-10% that if they've got the technical background and the operational background … would far outweigh the requirements to have lean understanding … because we believe they'll get embedded into the culture. (Andy, Head of Asset Management, EastManage)

Another possible explanation for this is that if the attitude, behaviour and technical knowledge of a candidate are matching a role profile, they can be trained for lean skills and knowledge. Several quotes support this line of reasoning, for example:

… we recruit for attitude and train for the skills. (Mathew, Transport Shift Manager, HighEnd)

… with the company induction, where everybody has to do it, … we will do some sort of lean awareness. (Andy, Head of Asset Management, EastManage)
Although attitude, behaviour and technical knowledge of a candidate are given priority for a non-managerial role, the findings suggest that panel members of a recruitment and selection panel might invite a candidate to demonstrate their awareness of lean principles, tools and techniques. For example, one informant reported that:

There are things like, if they've got an awareness of Lean Six Sigma, continuous improvement or any other sort of quality management systems. (Andy, Head of Asset Management, EastManage)

The findings also suggest that knowledge and prior exposure to lean, if they are coupled with attitude, behaviour and technical knowledge, give significant advantage to a candidate for non-managerial roles. For example, one interviewee commented:

If someone came along … and they know lean, they will be straight in … a strong individual ...
(Jenny, Head of Operational Services, MyFinance)

If we now turn to managerial roles, inclusive of team leader roles, the findings suggest that panel members give advantage to a candidate with prior exposure to lean way of working. The rationale is that a managerial candidate with prior exposure to lean brings with them their experience of employing lean practices. Such prior experience and understanding of lean practices enable them to troubleshoot lean related issues efficiently and in a timely manner. Several quotes support this line of understanding, for example:

I've recruited two operations managers recently, one for warehouse and one for transport. Is it [prior exposure to lean] something that I'm mindful of in terms of desirable on a CV? Yes … because of where we're going as a culture, to try and bring in those new skills, especially, when they've done them [lean practices] elsewhere and they may be more advanced in term of their thoughts of how lean should be implemented. (Ian, Distribution General Manager, HighEnd)

For lean roles, the findings suggest that recruitment and selection is significantly utilised to support lean service. Panel members ought to ask candidates of lean roles such questions that depict their knowledge and prior exposure to lean. For example, some of the interviewees said:

… I was appointed for a lean role … they [panel members] were bound to ask me this sort of questions [question about lean] … It would depend on the role … if it was a team manager, for example, I would say that some of the questions would be around continuous improvement …
(Steve, Programme Support Manager, FineBank)

… obviously, if you recruit for lean, yes. (Jenny, Head of Operational Services, MyFinance)

These views surfaced mainly in relation to utilising recruitment and selection to support lean practices. The findings also suggest that, as part of the induction process, candidates are enrolled in lean awareness training sessions and/or given a lean awareness booklet—which covers the basics of lean tools and techniques. One of the informants reported that:
As part of the induction pack … we basically give them [new candidates] a folder and it’s got one of the little booklets in there. So, it gives some understanding of it [lean] … (Michael, Site Manager, Hinance)

Upon the completion of an induction package, candidates have a general understanding of lean tools and techniques. They understand lean terminologies, tools and techniques. Therefore, there is an excessive emphasis on these two elements when appointing a candidate. For example, one interviewee said:

I think the induction pack and the training now are heavily influenced by lean. (Michael, Site Manager, Hinance)

Interestingly, the addition of the booklet and awareness sessions to the induction package were merely to support lean service. As one interviewee put it:

… one of my supervisors of 1b project [a requirement of a lean practitioner training course] … look at our induction … created an induction pack that we [Hinance] follow. (Michael, Site Manager, Hinance)

The lean booklet (a copy was obtained) covers several aspects of lean way of working such as health and safety, training courses, understanding visual boards, tools and techniques and other topics. The quote below illustrates that:

There is health and safety … a walk around the site … any key individuals within the team … a training plan … (Michael, Site Manager, Hinance)

Therefore, a possible explanation for the revised induction package in Hinance is that when new candidates are enrolled in lean awareness training sessions and given a lean awareness booklet, as part of their induction, lean way of working becomes 'business as usual' for them. The evidential quotes below further demonstrate this understanding:

… it doesn't matter who comes through the door as they can do the job and then we can work on … pushing that side of things … into their way of thinking because it's part of our every day. (Tatiana, Fraud Team Leader, Hinance)

In summary, for the informants in this study, recruitment and selection is used by their organisation to support lean practices. The findings suggest that preference is given to candidates with prior knowledge and experience of lean, especially if these are coupled with attitude, behaviour and technical knowledge.
4.3.2 Role profiling

Another recurrent theme in the data is role profiling (see Figure 51). This practice is used to clarify roles, tailor existing roles and create new roles to fulfil role profile needs of lean service. Therefore, it is either used to provide clarity around roles or create new roles. This section discusses this theme with evidential quotes from the data.

Role profiling refers to the activities and processes that service organisations conducted to analyse roles within their organisation to support lean service. Such roles could be their existing roles or new ones that needed to be created. It involved defining and clarifying responsibilities, required skills and/or knowledge for a given role. For example, some of the interviewees commented:

… our job roles have completely changed … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Everyone is clear of roles and responsibility. (Jenny, Head of Operational Services, MyFinance)

… you need to get people in these positions that you want them to be there. (Philip, Plant Manager, EastManage)

A common view amongst the interviewees was that their organisation used role profiling in two ways: role clarity and role creation. First, role clarity was to review a role in its entirety. It was to analyse the components of the role and understand how each component contributes to service delivery. One participant commented:
When we break down the job descriptions and we look at the roles and responsibilities, we look at factors and how the job role impacts with customer, how it impacts across the value chain, how it impacts with customer suppliers, how it impacts with other supply functions in the organisations, so, that's probably the biggest difference that we've seen when we've started to look at lean.

(Andy, Head of Asset Management, EastManage)

A possible explanation for this might be that the case study organisations clarified roles to (i) balance difficult and simple tasks of an employee, i.e. smoothing tasks or (ii) question why a role should exist or (iii) clarify the expectations of the organisation from an employee. And so, such clarification significantly supported lean service. Evidential quotes from the data support this explanation.

However, one could also argue that role profiling supports lean service, but it has negative impact on work and the employees who perform it. It might lead to the intensification of work pace when non-value adding activities are eliminated from a role. Consequently, role profiling changes work conditions negatively and results in employee health issues. While the generated data does not provide evidential quotes for this critical perspective, the researcher does not exclude it. Therefore, role profiling might lead to work intensification for some employees but improvements in productivity and job satisfaction for others.

Balancing the tasks of an employee, in terms of simple and complex tasks, circumvents overburdening them. Overburdening employees is a waste in the view of lean principles. For that reason, avoiding it using role profiling supports lean service. The participants commented:

… the tasks in the warehouse are going to be changed, so, the pickers don't get a good task and then get a bad task or then a good task and then an okay task. (Bill, Head of Communication and Services, HighEnd)

We may separate out complex work and simple work, and that enable us to put the simple work to the clinical member of staffs and the complex to a technical member of staff. (Mike, Design and Transformation Lead, FineBank)

Questioning why a role should exist and what value does it provide also supports lean service. Lean practices encouraged the case study organisations to view their roles in terms of how much value these roles added to service delivery. As some of the interviewees put it:

… their objectives that they should have within their role profiles, the reasons to having the role, also the alignment with how that work is managed by their teams … (Forza, Transformation Manager, HighEnd)
It was more about work re-organisation and then the right people doing the right job for the right skills and actually challenging them with that. (Jenny, Head of Operational Services, MyFinance)

Role clarity also enabled the case study organisations to clarify their expectations of employees. Employees had a clear understanding of what was expected of them and, thus, worked towards these expectations. Some participants illustrated that:

We need to share with them what is expected of them because if they have to sit there and try and guess, they are likely to guess the wrong thing. (Natalie, Operations Manager, MyFinance)

We're talking about expectations of people in roles … it does link it to some of the role profile side of things … (David, Lead Lean Consultant, MyFinance)

Subsequently, role profiling—to clarify existing roles—becomes an organisation-wide activity. Meaning that, at some point of lean maturity stage, it covers all roles within a service organisation.

The findings also suggest that three roles were specifically revamped to support lean service: team leader, assistant team leader and workplace coach. The quotes below further explain that:

… we try to build in to their objectives [team leaders] that they need to embrace a change relating to continuous improvement … (Robert, Depot Operations Manager, HighEnd)

… what is the role of a team manager, what is the role of an assistant team leader, what is the role of a workplace coach and actually had providing that clarity in their role profiles around who does what … (David, Lead Lean Consultant, MyFinance)

However, among these three roles, the findings suggest that team leader’s role is the most critical one to support lean practices. The team leader (also referred to as a team manager in the data) manages the people-aspect of their teams. They are influential in increasing the buy-in of their team members to lean practices. Therefore, clarity around this role and integrating lean objectives to this role profile significantly support lean. The comments below further illustrate this point:

There's nothing that we do in a lean project that will succeed without the team managers’ support. (Katie, Lean Leader, FineBank)

I talk about team leaders because they have got the most influence over the colleagues … it is in that level, the team leader, where they can then cascade a positive message [about lean] down to the colleagues. (Bill, Head of Communication and Services, HighEnd)

The assistant team leader acts as a flow lead. They supervise workflow and ensure that service delivery processes function smoothly. With team managers, they troubleshoot service
delivery issues and circumvent bottlenecks. They are also responsible to check the required skills within their teams. As one interviewee put it:

The assistant team manager is more what I would call a flow lead. So, they are managing the flow of the work … (Natalie, Operations Manager, MyFinance)

The workplace coach oversees quality within their teams. They support their members by ensuring they are working towards their targets and the quality of their work is up to the standard of the organisation. As the quote below demonstrate that:

The coach within our teams is generally supporting the team, well, the team manager and the assistant team manager, to build the training plan, reviewing the skills matrices with team members, but they're also analysing the quality data to do the root-cause analysis, reviewing complaints data. (Natalie, Operations Manager, MyFinance)

Second, while role clarity was to bring clarity around existing roles in the case study organisations, role creation was to create roles specifically to support lean service. The findings suggest that they had created several roles to support lean practices. These roles mainly were Lean Sustainability Consultant, Continuous Improvement (CI) Champs, CI Lead and Depot Operation Manager (DOM). The comments below reference some of these roles:

… there is Depot Operation Manager [DOM], that was created … one of the main aims was to progress lean culture. (Mathew, Transport Shift Manager, HighEnd)

We've created a role called champion roles where we get a particular member of staff more involved in a particular part of lean. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Talking about role creation, FineBank, for instance, had created the role of Lean Sustainability Consultant. The occupant was an ‘expert’ of lean. They provided FineBank with lean consultancy services such as lean training programmes. They also coordinated activities connected with reference to lean with 100-200 FTE employees across the bank. The evidential quotes below further explain this role:

We did implement some sustainability roles … we have a ratio of probably one sustainability person per some sort of 100-200 FTE [full-time equivalence], just to do the coordination and facilitation. (Mike, Design and Transformation Lead, FineBank)

… they would work directly with the business … their core responsibility was to make sure that lean was being embedded into everything … (Steve, Programme Support Manager, FineBank)

The role of CI Champs is usually occupied by employees who promote lean practices across their organisation. The comments below show that:

We've created a role called champion roles [CI Champs] where we get a particular member of staff more involved in a particular part of lean. (Tim, CUI Supervisor and Site Lean Agent, Hinance)
We've got my CI Champs who are spread out throughout the building … (Jenny, Head of Operational Services, MyFinance)

The CI Lead, on the other hand, facilitated lean service. He acted as a link between the CI Council and the rest of the workforce. Commenting on this role, the data suggests that FineBank, EastManage and HighEnd, all three, had introduced it. The below quotes demonstrate that:

There are five of me; therefore, the resource of a 150 has split between us. (Mike, Design and Transformation Lead, FineBank)

[James] is the CI lead … he can come up with all the information about the change … (Robert, Depot Operations Manager, HighEnd)

Further, HighEnd had created the DOM role to support lean practices. When interviewees at HighEnd prompted about DOM, they said:

There is a new role that was introduced eighteen months ago called the Depot Operations Manager or DOM, as we call him … three functions: Depot number two, so, when I am not here, he will run the depot, second bit, which is a CI piece or the lean piece, which is to manage lean roll out … third part of their role is to look after customer services and stock and admin. (Ian, Distribution General Manager, HighEnd)

There have been new roles created … there is Depot Operation Manager … was to progress lean culture. (Mathew, Transport Shift Manager, HighEnd)

Taken together, these evidential quotes from the data suggest that role profiling is used by the case study organisations to support lean service. In doing so, they utilise it to provide clarity around their existing roles and/or create new roles.

4.3.3 Capacity planning

Another recurring theme is capacity planning (see Figure 52). The case study organisations used it to understand the required human resources to fulfil customer needs. Such understanding also helped teams to trade surplus capacity among each other. This section discusses this theme using evidential quotes from the data.
The case study organisations used capacity planning to project the required human resources to fulfil customer demands on daily bases. Thus, capacity planning was used to support lean practices by enabling teams to meet customer needs, avoid overburdening employees and manage overtime. For example, the interviewees below said:

There’s a meeting held … what capacity have you got in your team. Does anybody need any help? (Tatiana, Fraud Team Leader, Hinance)

There was no room for someone say, well, I do process ten apps a day, the person sitting next to him say, well, I do forty… we’ve put models in to capture capacity planners and skills matrices overlaid to say, well, actually, on average you should be doing 25-30. (Jenny, Head of Operational Services, MyFinance)

A possible explanation for the utilisation of capacity planning is that it highlights discrepancy between the required human resources to fulfil customer needs and the available human resources. Discrepancy could be in the form of surplus or shortage of human resources. Any discrepancy does not support lean practices as lean encourages full utilisation of workforce and avoidance of overburdening employees. For example, the comments below further explain this understanding:

We've helped teams with the resource planning and, then, modelling and, then, forecasting … with appropriate measures around … how the teams are performing through a day. (David, Lead Lean Consultant, MyFinance)

We've got the board that says … green numbers plus hours … we've got more resources that we need for the day and red numbers is minus hours … we're trying give green hours to where the red hours are. (Dan, Assistant Team Leader, MyFinance)
In view of that, capacity planning, in the context of lean service, allows service managers to step back and think how their organisation accommodate the work they currently have and evaluate the available human capacity for that purpose. However, one could also argue that capacity planning in the context of lean service only serves short-term strategies to bridge any gap in the available human capacity to provide a certain service. Such short-term strategies include having people work over-time, pushing back deadline of service delivery and/or decreasing service quality. These short-term strategies, even if they work, contradict lean principles of just-in-time, quality and ‘respect for people’. However, the data suggests that the case study organisations use capacity planning to plan the maximum amount of work they are capable in a given period due to constraints such as quality problems, delays and absentees.

The comments below further illustrate why the case study organisation used capacity planning to support lean practices. They needed to project how much human resources they need to carry out the targets of a working day:

> We’ve got a capacity tool that we know of the days’ forecasts, of what we’ve meant to have that day, you know, how many people in … (Dan, Assistant Team Leader, MyFinance)

> For me, it is around understanding the capacity required to be able to meet your customers’ needs … being able to size, plan, organize, structure your team, so that they are not overburdened … giving our resources, we need to clear X amount of work. (Natalie, Operations Manager, MyFinance)

Therefore, the main objectives of using capacity planning to support lean service are two. First, it empowers teams to share surplus human capacity with teams within their organisation where this surplus is required to fulfil customer needs. This is in line with lean principles as lean focuses on value delivery to customers and improving their experience. Talking about this, the quotes below support this understanding:

> … there are sometimes some teams that basically following the checking of the utilization of staff … move the staff across different teams. (Beth, Lean Change Agent, FineBank)

> It's about trying to make sure we're moving staff where they're needed (Michael, Site Manager, Hinance)

Second, capacity planning avoids employees to be overworked. It also reduces overtime and enables teams to finish work on time (also see Figure 57). The comments below further illustrate that:
… we want everyone across the department, regardless of what team you are in, to be able to finish on time and go home for the day as per the plan rather than anyone team having to stay late … because they happen to have high volumes or a couple of people of sick. (David, Lead Lean Consultant, MyFinance)

Consequently, line managers are expected to know the human resources in their departments using capacity planning tools and clarify their position on how they utilise any surplus capacity or how to handle shortage of capacity. Commenting on this, for instance, some of the interviewees said:

The team leaders have … to understand the capacity within their department and how they support their network for next available process … (Chris, Warehouse Dayshift Shift Manager, HighEnd)

… [capacity planning] demonstrates how much time you have got … how much core work you have got … how many staff you have got in … it's almost like a balancing act in one respect … you might be down four hours a day. Another department might be up ten … you might say … can I borrow four hours of you tomorrow … That six hours are left … so, what can we do with that … we have got someone to do something about a project … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

The line managers were strongly encouraged to trade surplus human resources among each other. Some participants commented:

… [We] do like a horse trading and trade the hours around … we can lend this amount of hours to that team and this amount of this there … (Dan, Assistant Team Leader, MyFinance)

They will share and say … I'll get a couple of people off sick, I'm a bit lay or holidays high … I think, I'm a couple of hours short, so, if anyone is able to help … (David, Lead Lean Consultant, MyFinance)

However, the findings do not suggest that capacity planning is used to reduce headcounts by the case study organisations. On the contrary, they suggest that they release capacity to allow employees take on extra work or work on lean projects. As one interviewee put it:

We may not reduce our headcounts … we are releasing our capacity to take on more work. … to support other teams or … to take on more work … (Natalie, Operations Manager, MyFinance)

Overall, these evidential quotes indicate that capacity planning was used by the case study organisations to understand the required human resources to fulfil customer needs and help teams to trade surplus capacity among each other. This way, employees were not overburdened, and overtime was managed.

4.3.4 Absence management

The case study organisations used absence management to support lean practices (see Figure 53). They attempted to understand patterns of habitual missing of an employee from work. They also attempted to reduce absenteeism to keep a balanced workload for employees and
ensure an efficient and timely delivery of services. This theme is further discussed in the rest of this sub-section.

Absence management surfaces habitual patterns of missing of an employee from work. Habitual missing at work overloads present employees and disrupts workflow to meet customer demands. Consequently, it adversely impacts lean service since it increases operational costs. The quotes below support this understanding:

… what lean said is that it’s okay … but it’s still costing you this amount … And what can be done differently? (Bill, Head of Communication and Services, HighEnd)

… the absence policy is too generous. (James, CI Lead, HighEnd)

However, it is unclear from the data what absence level is considered as a habitual pattern of missing from work for an employee. The interviewees at HighEnd suggested that service managers considered +3 days as a habitual pattern of absence. The other organisations did not have a standard number for that purpose. Therefore, there was a considerable variation among the case study organisations in reported level of absence to indicate a habitual pattern of absence for an employee. What is clear from the data is that the average absence level must decrease compared to the time before lean deployment. Service managers across the case study organisations considered absence (regardless of its level) to be more disruptive and noticeable in the context of lean.
Habitual missing at work also overloads present employees as it increases their workload. Consequently, it increases health issues for the present employees. The quotes below further clarify this point:

Everybody knows what they're gonna do every single day, how and by when and who is off sick and who's got to be covered. (Jenny, Head of Operational Services, MyFinance)

I've got five hours’ worth of resources; we need to do five hours’ worth of work. (Natalie, Operations Manager, MyFinance)

‘five hours’ worth of work needs ‘five hours’ worth of resources to conduct the work. A possible explanation therefore for utilising absence management to support lean is that habitual missing creates shortage in the human resources required to do the work. Such shortage should be dealt with in two ways: overload present employees or delay the work. None of these options support lean way of working.

Overloading present employees creates waste and contradicts lean principle of ‘respect for people’. Delaying work, again, contradicts lean principle of just-in-time. And so, to support lean practices, a habitual missing at work was highly discouraged by the case study organisations. As the interviewees below stated:

… the absence procedure is currently being reviewed … we have to manage the policy to the best of our ability … (Ian, Distribution General Manager, HighEnd)

… you do have your absence measures and all of those things (Natalie, Operations Manager, MyFinance)

A common view amongst the interviewees in HighEnd was that absence management in its current form does not support lean practices. They suggested that it desperately needed a review in order to support lean service. For example, they commented:

The absence policy … is in desperate need of review, and, it’s being reviewed … some of our absence levels are quite high … if you go off-on sick, the first three days you are not paid, whereas at the [HighEnd] you get paid from day one. (Ian, Distribution General Manager, HighEnd)

… we are pretty keen on the absence policy … the policy is very generous … but you’re gonna get the colleagues that take advantage of that policy. (Bill, Head of Communication and Services, HighEnd)

However, these concerns, expressed about absence management, did not mean that the actual policy was intended to be amended. As the informants clarified that:
I won't say any policies per se … we're looking at reasons behind that. (Dan, Assistant Team Leader, MyFinance)

I don't think it has changed policy as such because obviously most of our policies are based on employment law … I think what it has given is strength because of evidence. (Jenny, Head of Operational Services, MyFinance)

The actual policy is based on the employee law. Accordingly, it does not change. However, the interpretation and enacting of the policy were intended to be utilised to support lean practices. In doing so, the case study organisations used absence management data to spot and evidence habitual patterns of missing from work. As one interviewee said:

… you still need to have honest conversation with your colleagues, to say … you have been off sick … how you’re feeling … that's your third period now you have been off sick … unfortunately, you’ve been investigated, and it could lead to a disciplinary action. (Ian, Distribution General Manager, HighEnd)

The data suggests that employees were provided with clarity around how 'absence' is to be understood in HighEnd. Therefore, to limit personal interpretations of absence policy, they were given a clear structure and interpretation from the perspective of their organisation. The comments below further illustrate that:

I think it's having a clear structure in place, really, and programme. (Mathew, Transport Shift Manager, HighEnd)

Tighten up the policy to make sure it is in keeping with industry standards and still act to support colleagues … (Ian, Distribution General Manager, HighEnd)

To tighten up its absence policy, HighEnd had devised a survey to track negative trends in absenteeism. For example, one interviewee said:

We have a survey every 12 month, called 12back … we just do a small sample of colleagues, their level of engagements, all the key indicators … like absenteeism or sickness or things like that … (Forza, Transformation Manager, HighEnd)

In addition, the case study organisations, that were further into their lean journey, encouraged teams to trade surplus human capacity among themselves to balance each other's workload. Such practices had helped them with managing unplanned absences. The comments below explain that:

… the management will go back to the team and he will say: Hi, could you jump in to the other team and help them. (Dan, Assistant Team Leader, MyFinance)

… I think we've got a good relationship between departments. (Dayle, Senior Operations Technician, EastManage)

Overall, the evidential quotes indicate that the case study organisations benefited from absence management to support lean service. Absence management surfaces habitual missing
of employees from work. A habitual missing pattern overloads present employee and disrupts workflow to meet customer needs. As a result, reducing absenteeism supports lean practices.

4.3.5 Retention and release

Another recurrent theme in the interviews was a sense amongst the interviewees that their organisations retained their employees by moving them across teams and departments and released them to work on lean projects (see Figure 54). This theme is discussed in this section using evidential quotes from the data.

The findings suggest that the case study organisations viewed dismissing employees, as part of their lean service initiatives, to negatively impact their lean programmes. For that reason, reduction of staff to support lean practices, in most of the organisations, had happened through natural attrition and cross-departmental training. While retention was to keep a stable workforce to support lean, release was to free employees to take lean projects and extra tasks and duties. Release, in this context, could also mean to let go of employees through natural attrition.
The case study organisations, particularly Hinance, acknowledged that lean service had enabled them to reduce staff number. Consequently, release, or reduction in the staff level, was understood by them to be in line with lean practices:

Company strategy is to generally reduce your staff levels down … Lean has created the forum to make that easier for the operation, for the people who currently work here. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Although the data does not directly suggest that releasing manpower means dismissing staff members in a lean context, employing lean could lead to staff reduction and causalities among the workforce of an organisation. One can argue that lean tools and techniques allow service managers to identify the need for staff reduction, develop a reduction proposal and plan and use lean tools and techniques as a vehicle to implement such a plan.

Nonetheless, Hinance, for instance, had the understanding that abrupt staff level reduction negatively impacts their service operations. To avoid such negative consequences, Hinance, for instance, sent out an assuring message to all its employees. Upon employing lean service, the Site Manager at Hinance sent out a direct message to all employees stating that they do not lose their jobs because of lean for at least 12 months into lean service. He, also, enrolled all employees in cross-departmental training programmes to enable them to work flexibly across departments. For instance, as one of the participants, when reflecting on this, commented:

In fact, we didn't cut any staff. We made that clear that we are not gonna cut staff to immediate lean, obviously as efficiencies come in … if somebody to leave, you don't tend to replace them … (Russ, Fraud/EPU Supervisor, Hinance)

And so, the findings do not suggest that releasing employees mean dismissing employees to support lean service. Therefore, releasing manpower, in the case study organisations, should not necessarily be understood as releasing surplus manpower to external bodies (i.e. dismissing employees). The evidential quote below support this understanding:

We may not reduce our headcounts … we are releasing our capacity to take on more work … to support other teams or actually being able to take on more work … (Natalie, Operations Manager, MyFinance)

On the contrary, the findings suggest that surplus manpower is usually released to take extra work or work on lean projects or cross-trained to fill vacant positions (that result from natural attrition) across the organisations. For instance, one informant reported that:
... it’s around releasing them of the jobs sometimes, if they've got some information gathering to do or/and something to type up or anything like that needs that time off the job; it is allowing them to have that time ... you could have the brilliantest idea in the world but if you are not going to be released off your job and your picking, you're never gonna implement it because you've not got the resources and time to do it. (Bill, Head of Communication and Services, HighEnd)

The findings also suggest that there is a general understanding among the case study organisations that since employees are looked after, they are expected to do their job to the best of their ability to support lean practices. They are expected to support lean practices as these practices make their life easier at work. As one interviewee put it:

It [lean] makes life much easier for the guys ... not just a financial return but in terms of making the job easy for the guys. (Philip, Plant Manager, EastManage)

Therefore, if employees were not able to meet targets—especially, targets that were set as part of lean service—there should be good reasons for them as to why they could not meet those targets. Talking about releasing employees because of underperforming lean service targets, one of the participants commented:

Everything is in the spot where they needed and they can go to that workshop [lean awareness workshop] ... (Philip, Plant Manager, EastManage)

If their inability was due to training needs, they were enrolled in training sessions to carry out their tasks and continue (i.e. to be retained). Otherwise, the findings suggest that, they must leave either on voluntary bases or through a formal route. Talking about this, one interviewee said:

Ultimately, you've got two options: ... can't do because ... job is too difficult for you or (b) you won't do because you can't be bothered ... that's where we need to manage those people and either continue with more training or take them down the more formal route ... (Ian, Distribution General Manager, HighEnd)

However, the evidential quotes generally support the understanding that termination seldom happened. It was used as the last resort. A common view amongst the interviewees was that employees were to be given an opportunity to meet lean service standards. This was clearly voiced by the participants:

You might produce ten widget supply and I only produce six ... how can I get you to produce ten or are you in the wrong role? (Mike, Design and Transformation Lead, FineBank)

Additionally, the participants thought that their organisations cross-trained employees to retain them and move them across teams and departments. Their organisations also used natural attrition to reduce staff level instead of termination when surplus capacity was no longer needed due to lean service. Some informants reported these understandings:
We managed to manage that through natural attrition and using cross training … we have an element of attrition that sinks within our operation. (Michael, Site Manager, Hinance)

You release capacity … then you just gain that benefit through natural attrition, so, people don't have to see it. It just happens … (David, Lead Lean Consultant, MyFinance)

In doing so, when a vacancy became available, rather than looking from outside for an external candidate to fill the vacant position, the case study organisations cross-trained their surplus manpower to fill that vacant positions. This way, natural attrition was coupled with cross-training to reduce staff level to support lean service. As one interviewee put it:

If we have the opportunity to release someone from a particular department … one of the things we do is quite a lot, and again this has been driven through lean, is a lot of cross training. (Michael, Site Manager, Hinance)

Though, the findings also suggest that sometimes natural attrition or cross-departmental training did not support lean service to retain staff members. This could be due to performance issues or an employee did not buy-in to lean practices. In this kind of situations, termination happened. For example, one interviewee said:

There were some casualties because some people just said I can't get it … they'd put the blockers up and people got to realize you've got to move with changes… (Jenny, Head of Operational Services, MyFinance)

Overall, these evidential quotes indicate that the case study organisations benefited from retention and release to support lean service. Retention allowed employees to keep their jobs by cross-training them. While release was to free employees to work on lean projects and take extra duties. However, termination also happened sometimes when an employee had performance issues or did not buy-in to lean.

4.3.6 Succession planning
Another theme in the interviews is succession planning (see Figure 55). It refers to identifying and developing suitable candidates among existing workforce to succeed departing members. The case study organisations used succession planning to prepare successors for roles in lean teams and other key roles such as team leader role. This section discusses this theme and uses evidential quotes from the data to further illustrate it.

The case study organisations identified and developed suitable candidates among their existing workforce to succeed departing members of lean teams and other key roles across their organisation. In doing so, they ensured that roles on lean teams were sustained and other
key roles had a successor. This was necessary to support lean service as continuity of their lean programmes was essential to embed lean practices in service delivery.

Lean teams are specialised dedicated teams in the organisations (for further details on lean teams see 4.3.12 Groups and teamwork). They are formed to support lean service. Team members receive significant amount of lean-related training because they play a vital role in supporting lean practices. Therefore, roles on the lean teams are crucial roles in supporting lean programmes.

However, individuals, who occupy such roles, might leave their organisation and work elsewhere. New candidates need to join these teams and fill their roles. New candidates can come from within or outside the organisations.

Figure 55: Succession planning screen snip from NVivo project

To support lean practices, the case study organisations had to keep lean teams in a functioning state. They used succession planning to identify and develop new candidates who were on their way to join lean teams. The candidates were enrolled in lean-related training programmes and prepared as successors in advance of the departure of the existing members on lean teams. As some interviewees put it:

We get people that leave, new people come in, so, if somebody new comes in, onto the CI council, they will get the training … that's really key in making it work. (Bill, Head of Communication and Services, HighEnd)
Ensuring that this skill set can be retained within the organisation and there are clear succession plans in place to sustain such activity. (Amy, Change Manager, HighEnd)

The findings suggest that the organisations appreciated the criticality of succession planning through experience. They realised that roles on lean teams require proper successors to sustain the teams and keep them functioning. For instance, one of the interviewees alluded to this notion of succession planning by stating:

… it was quite hard and we did lose a lot of people … so, it’s about making sure you’ve got successors who buy-in from the colleagues. (Mathew, Transport Shift Manager, HighEnd)

Succession planning was also utilised for other key roles in the organisations to support lean service. The findings suggest that roles such team leaders were considered by the organisations as vital roles to have a successor for. Team leaders were in charge of the human element of lean programmes in their organisation. These individuals significantly supported lean practices. And so, successors for their roles would bring continuity to lean programmes. For example, one interviewee said:

… interestingly, in my department, my team leader … she … didn't come back … that has enabled the successor to her … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

As part of succession planning to support lean, the findings also suggest that the case study organisations looked for surplus human resources within their organisation, in the first instance, to find a successor before recruiting from outside. This approach also supported lean practices as it helped the organisations to reduce staff level (for further details see 4.3.5 Retention and release). However, whether a candidate came within or from outside the organisations, succession planning included a full preparation package for the new candidates prior to succeeding any roles. The comments below further illustrate that:

… if you look at my team, I have got thirty-one persons. A minimum of one person, probably, is working through … every single part of the site. So, one person might be able to work in [name of a person]'s area, one person might work in [name of another person]'s area and, well, two people might need to work in [name of another person]'s area. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

What that [succession planning] allowed us to do is if we have someone who's left … we might need someone to replace that FTE, we can look elsewhere and possibly move someone from another area to fill in that area … (Michael, Site Manager, Hinance)

Taken together, these evidential quotes suggest that the case study organisations utilised succession planning to support lean practices. They identified and prepared candidates among their existing workforce to succeed members on the lean teams or other crucial roles to
support lean such as team leader roles. Candidates, who went through succession planning, could also come from outside of the organisations.

4.3.7 Training

Another theme from the data is the utilisation of training to support lean practices (see Figure 56). The case study organisations used this practice to equip their employees with lean-related knowledge, skills and expertise. Their budget of training was also increased so as the number of training programmes. Their employees were not only provided with several lean-related training programmes but also cross-trained and up-skilled to support lean service. This theme is discussed in this section and evidential quotes are used to support it.

Figure 56: Training screen snip from NVivo project

Most of the participants agreed with the statement that training employees on lean-related aspects is a significant investment to support lean practices (also see Figure 57). It was suggested that employees, without proper understanding and knowledge of lean tools and techniques, are unable to utilise lean practices in their area of work.
Accordingly, without proper training in lean tools and techniques, their contribution to lean is limited. For that reason, to train their employees on lean-related aspects, there is clear indication from the data that the case study organisations increased their training budget. As one interviewee put it:

We spent some money on the workshops [lean workshops] … we've just spent a lot of money on lean implementation. (Peter, Maintenance Manager, EastManage)

Some of the interviewees also argued that there was an increase in the number of training courses in their organisation. They reported that employees were enrolled in more training courses after employing lean practices. The quotes below further illustrate that:

There is a lot more training courses … training in people matters … there is more now than there ever was … they're coming thicker and faster at the moment as well, and, I think that is part of this cultural change [lean]. (Bill, Head of Communication and Services, HighEnd)

… before lean implementation … there was nothing … we do see quite a lot of courses tailored towards continuous improvement and lean activities. (Philip, Plant Manager, EastManage)
The findings suggest that majority of these training courses were tailored to support lean service. They aimed to train employees on lean-related tools and techniques. Talking about the increase in the number of training courses, some interviewees commented:

… a lot of the courses now are to get people on the lean journey or if they've not already on the lean journey to start on it, and, if it's not the sort of 1a and 1b courses, it's the operation excellence courses. (Dan, Assistant Team Leader, MyFinance)

… our Ops director wanted everybody in the whole [organisation], who works for him, to go on lean. (Jenny, Head of Operational Services, MyFinance)

As the latter quote also indicate, there were some suggestions that the case study organisations strongly encouraged their employees to attend, at least, lean awareness training sessions. For instance, some participants commented:

Any new staff go through a very well-defined training, and depending on their position, this could be a week or even longer. (Beth, Lean Change Agent, FineBank)

Everybody gets involved in every skill. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Seemingly, it was also suggested that, enrolling employees in lean-related training courses significantly contributed to lean service. An evidential quote from the data to further demonstrate this point is:

… one of my supervisors of 1b [lean training course] project … look at our induction … created an induction pack that we follow … with all of the lean stuff that we do on-site but put in a very plain English. (Michael, Site Manager, Hinance)

Taken together, these evidential quotes suggest that enrolling employees and team leaders in lean-related training courses was a significant investment for the organisations. Towards that end, the organisations provided several lean-related training courses for their workforce. Some of these courses were aimed at employees while others were for team leaders. Some others were for both: employees and team leaders. In summary, for the informants of this study, the main lean-related training courses are tabulated in Table 13.

However, it is vital to acknowledge that the findings suggest that most of the lean-related training courses were provided in-house by the case study organisations. They had specialised teams such lean teams to deliver these courses. The quotes below support this point:

… it’s [lean-related training] delivered through our internal delivery team. (Frank, Lean Leader, FineBank)
My lean team deliver all the training ... we do our own training in-house ... (Jenny, Head of Operational Services, MyFinance)

There is a lot of in-house training (Peter, Maintenance Manager, EastManage)

The findings also suggest that along the lean-related training courses, employees were up-skilled. A common view amongst the interviewees was that up-skilling employees was a significant element of supporting lean service. As some of the participants stated:

We've done a lot of training to up-skill people ... (Ian, Distribution General Manager, HighEnd)

Where we run a lean transformation activity ... a core part of that activity is to up-skill the business ... (Frank, Lean Leader, FineBank)

As lean came in, we up-skilled people ... (Tatiana, Fraud Team Leader, Hinance)

On the other hand, the organisations had also realised through experience that team leaders were influential in the workplace. They could influence employees to buy-in to lean practices and, thus, play a crucial role in lean service. For that reason, they were heavily trained in related-aspects of lean service. Reflecting on the data, it is safe to say that majority of the training courses were aimed at managing the human element of lean. The comments below illustrate this point:

... we have a series of training modules that we ask all team managers and customer service managers of each team of the business to attend. (Katie, Lean Leader, FineBank)

There is a lot more training courses aimed at team leaders and managers ... a lot more training in people matters ... (Bill, Head of Communication and Services, HighEnd)

All of the supervisors and team leaders on this site [Hinance] are trained to 1b standard now ... it allows them to look at operation through different eyes ... (Michael, Site Manager, Hinance)
Table 13: The main lean-related training courses across the case study organisations

<table>
<thead>
<tr>
<th>Training course(s)</th>
<th>Description</th>
<th>Evidential quote(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean awareness sessions</td>
<td>These sessions covered the basic knowledge of lean. They provided a clear introduction to lean at entry level and key basics of effective, efficient and engaging way of working. They were provided in-house to all employees. Prior knowledge of lean was unnecessary.</td>
<td>… we do workshops … standardization workshops to understand value stream maps, we will train them [employees], so, they understand what the basics are … (Mike, Design and Transformation Lead, FineBank)</td>
</tr>
<tr>
<td>The Lean Competency System (LCS): Levels of ‘1a’, ‘1b’ and ‘1c’</td>
<td>The LCS’s ‘1a, 1b and 1c’ were accredited lean training courses. These courses had been developed by the Lean Enterprise Research Centre (LERC) at Cardiff University (Lean Enterprise Research Centre, no date). ‘1a’ was ‘Lean Awareness’, ‘1b’ was ‘Lean Practitioner or Diagnosis and Analysis’ and ‘1c’ was ‘Lean Advanced Practitioner or Improvement and Implementation’. These levels all have competency descriptors (Lean Competency Services, no date). While ‘1a’ was a one-day course and covered an introduction to lean, ‘1b’ was a two-day course and covered the essentials of lean for a lean practitioner and ‘1c’ was more advanced and covered various lean tools and techniques. Employees were generally enrolled in ‘1a’ to get exposed to lean. If they were interested in further lean knowledge or if they had to work on lean projects, they were enrolled in ‘1b’. ‘1c’ was advanced and employees who delivered lean training courses were involved in it.</td>
<td>We actually had to help with some lean awareness sessions … get anything out on the table to then go ahead with it [lean]. (Tatiana, Fraud Team Leader, Hinance) We do lean 1a, 1b, 1c because we’re doing them all in-house and we’re accredited to do that … 1a training to over a thousand people … They [MyFinance] want all their staff to go on lean 1a … (Jenny, Head of Operational Services, MyFinance) We [Hinance], also, did some lean 1a and 1b courses. (Tatiana, Fraud Team Leader, Hinance)</td>
</tr>
<tr>
<td>Modular training courses</td>
<td>These were training courses that aimed at employees who conducted lean projects and they needed specific skills to run these projects. They were also utilised to address shortage of a specific skill across lean projects.</td>
<td>We all got the 5S, waste training ... (Russ, Fraud/EPU Supervisor, Hinance) We have invested in Lean Six Sigma Training for a number of colleagues … (Amy, Change Manager, HighEnd) We have the Green Belt training and whether that's Lean Six Sigma or Six Sigma … we've only just started doing the Six Sigma, the Green Belt training. (Andy, Head of Asset Management, EastManage)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Cross-training</td>
<td>Cross-training was to give employees flexibility to work across teams and departments. There were two main reasons for cross-training employees: First, it allowed them to cover their colleagues during unplanned absence. Second, when surplus capacity was intended to be moved; cross-training was necessary.</td>
<td>If we have the opportunity to release someone from a particular department … one of the things we do is quite a lot, and again this is being driven through lean, is a lot of cross training ... a lot of interdepartmental movement of people training in other areas … we're moving staff where they're needed and that started with cross training a lot of more staff between departments. (Michael, Site Manager, Hinance)</td>
</tr>
</tbody>
</table>
Overall, these evidential quotes suggest that the case study organisations utilised training and development to support lean practices. They trained their employees and team leaders to work on lean projects and support lean. They increased their training budget so as the number of the training courses. In doing so, employees were enrolled in more training now than prior to employing lean service.

4.3.8 Career development

Another theme from the data is career development (see Figure 58). It is an interesting theme which came up for example in the discussions with some of the participants mainly in Hinance, FineBank and MyFinance. It refers to employees who were involved in accredited lean training programmes and were able to work an alternative career path in lean service than the one they started with in their organisation. This section discusses this theme and illustrates how it is utilised by service organisations to support lean practices.

![Figure 58: Screen snip of alternative career path in lean from NVivo project](image)

The case study organisations provided their employees with an alternative career path. This approach while it benefited the organisations, it also benefited their employees who were engaged in lean practices. They were trained as specialised individuals in lean service in their organisation. For example, one interviewee said:

… this year did my lean consultants team go to the 'Train the Trainer' course … (Jenny, Head of Operational Services, MyFinance)
Therefore, the case study organisations were able to establish specialised lean teams from individuals who were willing to pursue a career path in lean. These individuals chose to be enrolled in specialised lean training programmes and worked as a lean consultant, lean practitioner, CI lead or lean expert. As one interviewee put it:

… we are giving them opportunities … to learn new skills … new techniques and tools and applying them into their role; skills they can take away … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

The specialised teams support lean service in their organisation and provided lean consultancy services (further details in 4.3.12 Groups and teamwork). An example of such consultancy services was the provision of lean training courses. As one interviewee said:

My lean team deliver all the training … (Jenny, Head of Operational Services, MyFinance)

Furthermore, individuals who were members of lean teams or lean deployment teams or CI Councils in their organisation; their membership in these teams did not necessarily attract financial rewards. Instead, they were trained and exposed to lean to an expert level that enabled them to work within their organisation or outside as lean experts. The comment below illustrates this line of thinking:

… I wouldn't think that there is going to be an increase in pay but what it may do is offer some other career paths for these people, so, we came up with the advent of the central team; they may see that there are other opportunities for advancement. (Forza, Transformation Manager, HighEnd)

Therefore, the case study organisations provided their employees, who actively engaged in lean practices, an alternative career path in lean service. They also provided them with the required resources and time from their day to day work to hone their lean skills and knowledge. The comments below exemplify that:

All in work's time, so, if they need a, like, 2-3 hours to put that into practice and we will give them 2-3 hours … (Mathew, Transport Shift Manager, HighEnd)

These evidential quotes suggest that the case study organisations provided their employees with an alternative career path. They encouraged them to specialise in lean service and work and support lean practices. In doing so, while they found support for their lean programmes, employees, who supported lean practices and specialised in lean, were given opportunities to work a career path in lean such as a lean consultant, lean practitioner, CI lead or lean expert.
4.3.9 Performance management

Another recurrent theme in the data is the utilisation of performance management to align performance of employees with lean service targets (see Figure 59). The case study organisations assigned their employees with lean specific key performance indicators (KPIs) to achieve. This way, supporting lean practices was embedded in the performance requirements of employees. This theme is discussed in this section and evidential quotes used to further clarify it.

Performance management, in this context, refers to the activities that the case study organisations conducted to ensure goals and targets of lean service were consistently, effectively and efficiently met. Such activities enabled them to align their human resources to support lean practices. They used this practice to assign their employees with lean specific KPIs to fulfil.

The findings suggest that the organisations utilised performance management to insert lean-related elements to performance targets of employees and encourage them to work towards lean service. As one interviewee precisely said it:

... we have encouraged the operational teams to focus on performance management, both through implementation of KPIs, balanced scorecards, individual performance management and coaching... (Frank, Lean Leader, FineBank)
Most of the informants reported that lean service in their organisation was aimed to improve workplace and how they performed their job. They were not surprised that standards of performance were, normally, expected to rise. They felt that utilising this practice to support lean allowed their organisation to set new expectations for them in terms of service delivery and productivity. The quotes below further illustrate this point:

We've changed some of the performance standards because we've made jobs easier by implementing certain changes … (Ian, Distribution General Manager, HighEnd)

… we will be reducing time to repair because we've got the right equipment in the right place and the people got everything they need to be able to do the job quickly … (Peter, Maintenance Manager, EastManage)

… for the people doing the actual work … there will be some changes where there's been process improvement … there will be changes in terms … how they're measured and how they're managed, how their work is managed … (David, Lead Lean Consultant, MyFinance)

Interestingly, therefore, the findings suggest that the expectations of the organisations in terms of performance management were no longer the same as prior to lean. Surprisingly, an employee who used to do an ‘okay’ job, after employing lean, was talked to by their direct line manager on how they can improve their performance to a higher level. By the same token, an employee who did a fantastic job, also, had a conversation with their manager on how they could keep their performance at that level. As one interviewee said:

… If people sat between an area that we think is acceptable, there was no real conversations that we normally have with those individuals … people who sat outside of that, and, they were a below performance, then, we would intervene and talk to those individuals. But we never looked at or try to lift all of the team’s performance up which was a sort of failing them … now; we will talk to them all the time about their performance. (Michael, Site Manager, Hinance)

Furthermore, talking about relevant KPIs to lean service, the informants indicated that their performance management included some sort of these KPIs now. These KPIs were expected to be fulfilled like other KPIs on their balanced scorecard. For example, some of interviewees said:

… it’s part of their role … they have individual performance objectives as additional productivity, quality-related and so forth and may be skill-related, as well, and, then you have got behaviour objectives but we also now have lean objectives. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

… we try to build into their objectives that they need to embrace a change relating to continuous improvement … (Robert, Depot Operations Manager, HighEnd)

Therefore, the most striking finding to emerge from the data was that the organisations included measures of lean-related objectives in employee performance management. There
were indications that they appraised employee performance against those lean-related objectives like other functional performance objectives. As some informants put it:

We manage them [employees] upon performance improvement and purely around lean which is something new ... we manage people on lean ... it [lean] goes towards their overall marks at the end of the year on the appraisal system. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

When asked about using performance management to support lean practices, the participants were unanimous in the view that their organisation had used it in several ways. The data suggest the main ones as the following:

- Supervisors were responsible to track lean-related objectives of their employees as part of employee appraisal. As one interviewee put it:

  We [Hinance], also, are making our supervisors more responsible for elements of lean ... we've got quite structured tool we use on that now, so, there are elements of lean that we would track in for each of the individuals as well, so, how much involvement as an individual contributed to lean. (Michael, Site Manager, Hinance)

- Tasks were standardised. Employees were expected to follow the standardisation. As some interviewees put it:

  ... when colleagues pick, they have a pick rate ... this is the figure that we're now working to ... (Ian, Distribution General Manager, HighEnd)

  ... we introduced performance steps ... we time to know how long it takes them to get through this ... (Tatiana, Fraud Team Leader, Hinance)

- If an employee constantly met their KPIs, the bar was set higher. As one interviewee put it:

  They are changeable KPIs, if you constantly meeting an objective ... then we move that bar higher. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

- Lean specific KPIs were clear and visible objectives. As some interviewees put it:

  ... now, they are being set clear objectives to achieve, a certain numerical value in terms of CI initiatives ... (Chris, Warehouse Dayshift Shift Manager, HighEnd)

  ... if you are working really hard and somebody is not, this impacts the whole team. That wasn't really visible before we brought lean in (Russ, Fraud/EPU Supervisor, Hinance)

- Performance data of employees, obtained by using lean tools, were used in performance management conversations with employees. As some interviewees put it:

  We start to pull, take data and put it on charts to create leading indicators ... (Andy, Head of Asset Management, EastManage)
… you have the data to be able to say: I am not sure what is happening here, you are not performing to the standards that I expect for the quality, productivity … (Natalie, Operations Manager, MyFinance)

- Team leaders had regular one to one performance management conversations with their team members. As some interviewees put it:

  … we do more regular one to ones now with the staff, and, let them know their performance and if they are struggling with anything that, you know, working with them, to build them up. (Tatiana, Fraud Team Leader, Hinance)

  … one to ones are done on a very regular basis. (Paul, Managing Consultant, MyFinance)

- Team leaders had a standard agenda during one to one performance management conversations. As one interviewee put it:

  … with one to ones, they encourage a standard agenda, so, that means you're treating people or treating everybody the same … you're covering all the good things and the bad things and giving everybody equal access to development. (Katie, Lean Leader, FineBank)

- Performance management was better structured around measuring quality, customer service and productivity and included more performance metrics. As one interviewee put it:

  … prior to lean, very few measures were in place … around performance in a quality perspective … productivity or realistic expectations … feedback to individuals … (David, Lead Lean Consultant, MyFinance)

- Every employee had a skills matrix. A skills matrix was a table on which the skills of an employee were clearly and visibly displayed. The purpose of it was to understand, develop and track employees and their skills. As one interviewee put it:

  We would do a skills matrix. A skills matrix would be around … what the skills that you have now … if in twelve months’ time the objectives and the organisation are different, you have to use skill's matrix and flex that … (Paul, Managing Consultant, MyFinance)

In summary, for the informants in this study, the case study organisations used employee performance management to encourage employees to meet lean objectives and lean-related goals. This way, employees were expected to fulfil these objectives in the same way as other objectives on their balanced scorecard. They were oriented to work towards lean through their performance management.

4.3.10 Reward and recognition

Reward and recognition is another recurrent theme from the data (see Figure 60). The case study organisations used this practice to improve the buy-in of their employees to lean service
and orient them to support it by rewarding and recognizing lean desired behaviour and outcomes. This theme is discussed in this section and evidential quotes are provided to support it.

Many of the participants indicated that their organisation used reward and recognition to reward and recognize lean desired behaviour and outcomes. In this context, reward refers to incentives of monetary and non-monetary nature given to an employee to repeat a desired lean behaviour or outcome. Recognition refers to an award, such as an innovation certificate or a ‘Thank you’ letter, given to an employee for their continuous improvement ideas or their contribution to lean service.

![Figure 60: Screen snip of reward and recognition from NVivo project](image)

The findings suggest that the organisations found reward and recognition to be crucial to support lean practices. They needed to reconsider their reward and recognition scheme to utilise it for that purpose. They had the understanding that an employee, who suggests a continuous improvement idea that saves them thousands of pounds, is discouraged with, for example, a £20 top-up or voucher. Commenting on this, some of the interviewees said:

We did it [reward and recognition] before but it was always a bottle of wine, something very nominal, something, you know, £10, £20 tops … we've now realised that … you come up with an idea and saves £5000, £10000, a £1000, whatever, for me, then, to give you a bottle of wine, you will be like: okay, thank you for that, you know, in a sarcastic way … you'd probably be thankful of it but at the same time you'd be thinking: I'm coming up with all these ideas and I don't feel like
I've been rewarded or recognised well … It's not just about throwing lots of money at it but it's doing it in the right way … (Ian, Distribution General Manager, HighEnd)

… there have been some financial benefits for the guys through lean … it's something that we are looking at. (Philip, Plant Manager, EastManage)

For that reason, many of the informants felt that their organisation had broadened their selection of reward and recognition. They reported that this practice was used in several monetary and non-monetary ways to support lean practices. The data suggest the following as the main ones:

- **Prize**, an amount of money, awarded to an employee for their continuous improvement ideas when these ideas were materialised. The data indicate the two figures of £25 and £350 for that purpose. The quotes below further explain it:

  … we said, we will spend more money, so, this year, we, the first idea that we've got in February, we paid £350. (Ian, Distribution General Manager, HighEnd)

  … it's just only £25 … but I wouldn't say it was, it was necessarily huge carrot for people. (Jenny, Head of Operational Services, MyFinance)

- **Bonus** refers to an extra amount of monetary payment to an employee along their salary. Employees were given bonus for achieving KPIs that delivered value to customers, conducting lean projects and contributing to lean service. The quotes below further describe it:

  You are paid bonus on your ability to hit customer orientated KPIs. (Paul, Managing Consultant, MyFinance)

  … a shift manager should do two lean projects per annum as part of their bonus … we believe that … by putting a monetary reward on it, it may influence people to do that. (Andy, Head of Asset Management, EastManage)

- **Employee of the month (EOM)** was used to encourage employees to work particularly towards lean practices. It involved the recognition of an employee (in their area of work), a place in the organisation newsletter and a monetary prize. The rationale of the organisations to use EOM was that the nomination came from employees, themselves, and, thus, room for management bias was limited. The quotes below further clarify it:

  … employee of the month, and that's nominated by the people on site rather than by anybody in the management for something they've done and that seems to be working well … they get the employee of the month badge to stick behind their desk for a month and they, also, get a reward in that content, the family up to do something on their choice. (Andy, Head of Asset Management, EastManage)

  We have, also, done an employee of the month across the site as well … individuals fill out a nomination for other individuals and depend on who's got the most votes … there's a monetary prize attached to that. (Michael, Site Manager, Hinance)
• Points were awarded to employees for their contribution to lean service. These points were exchanged for an item of choice. The findings suggest that this was an effective tool to support lean practices in Hinance. As one interviewee put it:

There is a recognition tool and you can award points to individuals … we do use that and that's an effective tool … lean has helped us recognise that we didn't do enough of that. (Michael, Site Manager, Hinance)

• ‘Meal’ (or ‘Mighty Meal’) was a meal that MyFinance provided it to its lean champions as a reward for their contribution to lean service. This meal happened every six months. The quote below further explains it:

… every six months, the people who have done brilliantly well at that [lean] and there is some really good, you know, gold nugget ones, plus the people who have gone their 1bs [lean practitioner course], we would go for dinner… they all talk about their experiences… what they've done, what they've made improvements for them … It's just to try saying thank you first of all but also look at, you know, the amazing power on the table like you've got of people who are so change focused … (Jenny, Head of Operational Services, MyFinance)

• A ‘weekend away’ with partner was a paid weekend which was rewarded to an employee for their continuous improvement ideas. The quotes below further clarify it:

For the colleague to take his wife away for the weekend, a hotel and meal, so, what I'm trying to say we're putting a little, a little more money into it now … (Ian, Distribution General Manager, HighEnd)

We went to a second reward scheme where the site manager could reward individuals on performance, and, basically, that came in the form take your wife out for a meal and we'll pay for the meal … (Andy, Head of Asset Management, EastManage)

• Certificate of innovation was a form of recognition in Hinance. They issued these certificates to employees whose continuous improvement ideas were recognised as innovative ideas. The quotes below further clarify this certificate:

The team [innovation team] will issue a certificate for them [employees with CI ideas] … (Michael, Site Manager, Hinance)

… it's a certificate and it will say … this [a continuous improvement idea] came from this person, all the rights on the innovation side … the ‘best ideas’ as they get called out and they [employees] might win a day off. (Tatiana, Fraud Team Leader, Hinance)

• ‘Thank you’ letters simply were saying ‘thank you’ to employees who had contributed to lean service. These letters were mainly issued from the CEO office and sent to employees whose continuous improvement ideas had made a difference in their organisation. The quotes below further clarify this recognition type:
... a minimum ... you'd get a ‘Thank you’ letter. (Dayle, Senior Operations Technician, EastManage)

... we have ‘Thank you’ scheme and what we call it 'make a difference', termed as a 'make a difference' scheme where we can highlight where people have gone above and about to generate quick ideas for the customers and the business. (Frank, Lean Leader, FineBank)

Taken together, the discussion and the evidential quotes suggest that the case study organisations used reward and recognition to direct employees to work towards lean service. They used several strategies for that purpose. Some of them were monetary such as prize, bonus and a weekend away with partner. Others were non-monetary such as lean champions’ meal and a certificate of innovation. Some others were monetary and non-monetary such as employee of the month. The main purpose in all these strategies was to recognise and reward lean desired behaviour and outcomes.

4.3.11 Employee voice

Another recurrent theme from the data is employee voice (see Figure 61). The case study organisations reinforced lean practices by employing activities that captured employee voice and concerns on lean projects. These voices helped them to hone aspects of their lean programme and better orient employees to work and support lean service. This section discusses this theme and share several evidential quotes from the data that further explains it.

The case study organisations allowed their employees to air their voice and concerns on lean related projects in lean-related meetings. The collected data for this research inquiry includes
several concepts to represent the type of the activities the organisations conducted to capture employee voice. These concepts mainly were ‘moan zone’, ‘idea box’, ‘my CI’, ‘graphite board’ and ‘bug board’. They all share one main component which is capturing employee voice and orienting it to support lean practices. Such voice is normally in the form of continuous improvement ideas. Commenting on employee voice, some of the interviewees said:

... it’s always been about getting to that bottom-up approach, so, managers don’t have monopoly on good ideas, okay, people who have good ideas are the people that do the job, day in and day out. (Ian, Distribution General Manager, HighEnd)

We, actually, had to help with some lean awareness sessions and air everybody’s views, get anything out on the table to then go ahead with it [lean]. (Tatiana, Fraud Team Leader, Hinance)

The organisations normally supported the understanding that employees’ improvement ideas support lean practices. They advocated that listening to employee voice and capturing it allowed a bottom-up approach to lean service. This way, as the interviewees explained, lean practices were not forced but gradually became a ‘business as usual’ for employees.

Talking about employee voice and how to capture it, some of the participants discussed the details of several concepts that were used by their organisations for that purpose. The evidential quotes below illustrate these concepts:

- ‘moan zone’

  We've got a thing called the ‘moan zone’ … if you've got an issue, you can write it on a card and they'll be picked up … (Andy, Head of Asset Management, EastManage)

- ‘idea box’ or ‘bright idea box’

  … we did talk about having some kind of good idea box … (Peter, Maintenance Manager, EastManage)

  We've got a board called the bright ideas board. (Chris, Warehouse Dayshift Shift Manager, HighEnd)

- ‘my CI’

  … if you think you can do quicker, knock yourself out … click on ‘My CI’, do it. (Jenny, Head of Operational Services, MyFinance)

- ‘graphite board’

  We've got the graphite board which is new and it's worked really well. (Bill, Head of Communication and Services, HighEnd)
• ‘bug board’

The TIM WOODS [*] is on the board … So, what's bugging them [employees] in their job, and we call it the bug board. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

[*] TIM WOODS is an abbreviation that stands for the eight types of waste in the view point of lean. They are: Transport, Inventory, Motion, Waiting, Over-production, Over-processing, Defects, and Skills.

A possible explanation for listening to employee voice by the organisations is that their employees perceive it as a form of being involved in lean practices. This perception would encourage them to value their continuous improvement ideas and share them with management. Consequently, employees would feel valued by their organisation throughout the maturity stages of lean. The comments below further clarify this understanding:

What we found is that by allocating areas to everybody on-site … they realised that if they had ideas that those ideas be taken forward … we started to see people to say: ‘Oh, great!’ We can get involved. (Andy, Head of Asset Management, EastManage)

A lot of it [lean] is about culture, about listening to people, listening to your colleagues, making them feel valued … (Ian, Distribution General Manager, HighEnd)

Another possible explanation for utilising employee voice to support lean practices is that listening to employees generates continuous improvement ideas. While this allowed the organisations to claim a bottom-up approach to lean service, it also allowed them unrestricted access to continuous improvement ideas of their employees.

In doing so, the organisations were also enrolling team leaders in lean awareness sessions to encourage them to be more receptive to ideas from colleagues on the shop floor. For example, one interviewee said:

… even making sure that … one person talking and everyone else silent … making people so more comfortable about speaking out and giving their view without feeling scared in taking a bad idea … (Sue, Design and Delivery Agent, FineBank)

Further, the participants thought that listening to and capturing employee voice had gone beyond documenting continuous improvement ideas. They reported that their organisations had worked to convert improvement ideas to reality. They also commented that if an idea was not feasible financially to implement, their organisations usually wrote to the owner of the idea and explained why they were unable to convert the idea.

Talking about the importance of the continuous improvement ideas (from employees), some of the interviewees discussed that any improvement idea represents an employee voice. If the
idea was not implemented, they needed to be informed that they were listened to but their idea was not financially feasible to be implemented. This way, the employees were provided with evidences that their voice was listened to. For example, some participants commented on this:

… they have a voice and its listened to … If there is something we can’t do, we will consult with that person and say, look, we tried this. This is far from what we can do, are you happy if we close it now. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

However, the findings also suggest that these improvement ideas from employees—their voices—were normally evaluated in terms of financial benefits to their organisation. For that reason, the conversion of an idea or considering a concern of an employee about a lean project were generally considered after considering its financial feasibility and benefits. The comments below support this point:

I guess finance is a big part, really, it depends what you can bring … it's got to save time or money or whatever … it's got to add some value. (Dayle, Senior Operations Technician, EastManage)

These evidential quotes from the data suggest that the case study organisations listened to and captured employee voice to support lean service. The activities they conducted for that purpose were labelled as ‘moan zone’, ‘idea box’, ‘my CI’, ‘graphite board’ and ‘bug board’. However, the main element in these activities was that employees were listened to by managers for their continuous improvement ideas and concerns on lean projects. This way, employees were encouraged to share their ideas with regard of lean service or workplace improvement with their organisations.

**4.3.12 Groups and teamwork**

Another recurrent theme from the data is groups and teamwork (see Figure 62). The case study organisations significantly utilised groups and teamwork to embed lean practices in their organisations. They encouraged their employees to work in groups on lean projects and form specialised teams to support lean. This theme is discussed in this section and evidential quotes from the data are provided to support and further explain it.
The findings include several examples of how utilisation of groups and teamwork led to significant improvements in service delivery processes. Groups and teamwork allowed employees in the organisations to join efforts to embed lean practices in their area of service delivery. Many of the participants agreed with the statement that utilising groups and teamwork had encouraged them to support lean practices. For example, the quote below further clarify this understanding:

… that piece about talking to each other and understanding everybody's piece in the jigsaw … we might be trying to fix a problem a lot of the times, it is not just one department or one shift … it is just common sense in terms of getting people involved to say, hang on a minute, if I change this, this might make my job easier, it will make your job easier but [name of a person]'s job over there makes it ten times worse. (Ian, Distribution General Manager, HighEnd)

The findings suggest that groups and teamwork not only allowed the organisations to access a joined effort of employees to support lean but also avoid lean changes that might improve service delivery in one department and worsen it in another area. By bringing the employees together, they ensured that everyone was fully aware of the required changes and how much impact these changes would have on them. Another quote from the data on the utilisation of groups and teamwork indicated the use of ‘PIT’ activity in teams to orient team members to support lean. As one interviewee put it:

… we’ve introduced … what we call the PIT … performance improvement tone … dissect the team into ten component parts and … the team will rate those elements from one to ten … the worst performing elements in their view … then to produce an action plan on trying to improve … it is not to say that those elements are necessarily bad in any way but for some reason, they put it at the bottom of the list. (Michael, Site Manager, Hinance)
Two explanations could be offered for the utilisation of groups and teamwork to support lean service. First, the organisations had learned from experience that leading lean programmes is more successful through organised teams. Therefore, team working by combining efforts of employees and directing these efforts towards one focus (i.e. lean service) was perceived to better support lean service. The comments below further clarify this point:

I think in the past it was probably a lot more disorganized ... It's been a bit more organised and ... who's leading what focus ... there's a lot of focus on breaking down silos ... (Dan, Assistant Team Leader, MyFinance)

I've asked all of my team [lean team] to look at the departments and their direct reports and look for initiatives through lean mentality to continuous improvement of how we can be better. (Chris, Warehouse Dayshift Shift Manager, HighEnd)

Some of the projects that we've had ongoing have been really good, got sort of cross functional, cross departmental teams together … (Andy, Head of Asset Management, EastManage)

Second, utilising groups and teamwork allowed the organisations to engage members of teams in lean projects in their area of work. In doing so, they gave employees ownership of improving their area of work. As a result, this approach encouraged them to work closer with each other on a team level. The evidential quotes below further explain this understanding:

... they'll talk to the team and decide who would take that action forward and it may be the person who, you know, brought that particular thing out. (Michael, Site Manager, Hinance)

It gets people talking … who wouldn't normally work together, so, it certainly brings operations and maintenance together to work on a project, so, you get the buy-in from both sides of the plant … (Peter, Maintenance Manager, EastManage)

However, on an organisational level, utilising groups and teamwork enabled the organisations to encourage various functional and specialised teams to collaborate and work with each other on various lean projects. As one interviewee said:

What we sometimes do, as well, is to encourage people to visit the other teams to give them better practice, showing them problem solving across the teams as well. (Sue, Design and Delivery Agent, FineBank)

Collaboration among teams, therefore, as the findings suggest, was highly encouraged by the organisations to support lean practices (further details on collaboration is in 4.3.13 Employee communication and collaboration). Teams were encouraged to trade surplus capacity among each other. This was especially true when one team had shortage of capacity due to unexpected absentees.

Teams, on an organisational level, whether in the huddle meetings they held every morning among team managers or from team managers’ observation on tours around workplace,
helped other teams that had shortage of capacity. Some of the participants labelled such practices as ‘horse trading’ or ‘hours trading’. For example, some of the participants commented:

We know how much capacity we've got … we kind of do like a horse trading and trade the hours around … we can lend this amount of hours to that team and this amount of this there. … we’ve tours that we’ve got to see the people in the teams, then end up working for … a couple of teams … we’re trying give green hours to where the red hours are. (Dan, Assistant Team Leader, MyFinance)

… you might be down four hours a day, another department might be up ten, so, you might say that person has got ten, can I borrow four hours of you tomorrow? (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Furthermore, to support lean practices, teams were generally structured to have a team manager, an assistant team manager and a workplace coach (or quality expert). The team manager normally managed the people-side of teams—promoted the lean principle of ‘respect for people’. The assistant team manager acted as a flow lead—sorted out bottlenecks and ensured the flow of work was smooth i.e. another principle of lean which is called flow. The workplace coach was a quality guru who checked the quality of work in teams and encouraged team members to work towards their goals. The quotes below further illustrate that:

… majority of teams will have a team manager, an assistance team manager and a workplace coach … after that will be our processing team. Team manager is … people manager. The assistance team manager is the flow lead and the workplace coaches … ensure that people are performing in the right direction. (Natalie, Operations Manager, MyFinance)

… they ended up with one team manager for a group of 10 staff … obviously that was a much more manageable approach, but it was a lean focus that forced them to rethink about it … (Steve, Programme Support Manager, FineBank)

The latter quote also indicates that not only the structure of teams was adjusted but the size of teams and span of control were also tuned to support lean. As team managers were expected to do process confirmation, assistant team managers to look after the flow of work and workplace coach to check quality of work, size of teams and span of control had to be reassessed by the organisations. The quotes below further explain this understanding:

… we looked at our entire organisation to get better spread because that was also to allow us to do the one to ones that we wanted to do to make them meaningful … we’ve been trying to balance that out. (Michael, Site Manager, Hinance)

… it’s one of the things we look to do when we go to a new area. We say: Okay, so, don’t send one manager 40 staff. (Jenny, Head of Operational Services, MyFinance)
The findings also support the understanding that the organisations worked through specialised teams to support lean practices. Examples of these teams were lean teams, sustainability teams and other specialised teams. Some participants commented:

Onsite, we've developed a change team, so, it has got some of the guys and, you know, you need to be sort of careful who you put on the team, and it's the people who promote lean activities. (Philip, Plant Manager, EastManage)

… all teams that set under operations have their own site [website] … it tells you what work that team deals with … (Natalie, Operations Manager, MyFinance)

For instance, lean teams, one of the specialised teams, were formed from representatives of functional groups. They were tasked to lead and support lean programmes in their organisation. They performed various functions such as providing lean training sessions and promoting workplace communication. The quotes below further explain this point:

We have built a CI council which is … colleague of the shop floor … each site is operating in terms of sort of CI councils … those CI councils then link in to a national council … (Robert, Depot Operations Manager, HighEnd)

I think they [lean teams] are actually people just looking at Lean Six Sigma and continuous improvement. I think we've got teams in the business solely dedicated to that. (Dayle, Senior Operations Technician, EastManage)

Another specialised team was the sustainability team—mainly in the FineBank. This team looked after the sustainability of lean practices in all areas of the organisation. They also looked after the work of lean teams. They checked periodically if lean was still ‘business as usual’ in various pockets of their organisation. As some of the interviewees provided details on this team:

… they have created the lean group [sustainability team] within the business where they are checking that there is still sustainability within the business. (Beth, Lean Change Agent, FineBank)

… the sustainability team was a separate standalone team in its own right … to make sure that [lean] was still successful and evolved overtime … (Steve, Programme Support Manager, FineBank)

Overall, this section demonstrates that the case study organisations utilised groups and teamwork to support lean service. In doing so, they revised the structure and span of control in teams. They created and maintained specialised teams such as lean teams and sustainability teams. The main purpose in utilising groups and teamwork was to encourage employees to work in groups (and as a team) to support lean practices.
4.3.13 Employee communication and collaboration

Another recurrent theme from the data is employee communication and collaboration (see Figure 63). The findings suggest that this practice is crucial to support lean practices. The case study organisations used employee communication to share information on lean projects with their employees and promoted collaboration among them to work on these projects. For that purpose, they utilised several communication channels to keep them up-to-date with information on lean service. This theme is discussed in this section and evidential quotes from the data are used to justify it.

![Image: Employee communication and collaboration screen snip from NVivo project]

Figure 63: Employee communication and collaboration screen snip from NVivo project

Most of the informants emphasized that their organisation used workplace communication and collaboration to support lean service. They referred to the usage of multiple communication channels to share information on lean among each other. These communication channels were varied and plenty. Although some of them existed prior to lean, they were specifically utilised to support lean practices. Other channels were new and designed to support lean service. Therefore, they were unanimous that workplace communication is vital throughout the lean maturity stages. As one interviewee clearly put it:

A great example was a buffer problem that we had on the transport … for some reason, every now and then, it would have a problem moving that data over … in the performance meetings … one particular transport was quite low and he said we had a lot of buffers yesterday … What sort of buffers? What sort of time was that then? So, he said the time and then someone else in the group, then, said that is weird because I get them, I got them as well around that time, and, then someone else said: Yeah, I got them as well around that time. So, we actually took that to our hardware/software engineers to have a look at, to try to understand what that was. What they
found is that there was virus definition update that happened at that particular time of the day. So, all they did is moved that [time] to a different time slot that wasn't as time critical and that problem went away, and they've lived with that for years. (Michael, Site Manager, Hinance)

A possible explanation for the vitality of employee communication to support lean might be that the organisations used this practice to bring employees and managers closer to each other to work on lean projects. The quote below illustrates this point:

The communications area is not gonna make people pick faster. But if they've got the information slicker, and, they've got it more appropriate to what they need; they feel more engaged … Therefore, they feel more value … (Ian, Distribution General Manager, HighEnd)

Another possible explanation for utilising employee communication to support lean was that the organisations used it to encourage collaboration among employees on lean projects. Collaboration, in this context, referred to the process of employees working together across departments to support lean service.

Some of the informants argued that the main rationale for collaboration was to avoid duplicate lean projects. Lean projects were generally the product of continuous improvement ideas. These ideas normally came from employees on the shop floor. If there was no collaboration among them, some of these ideas might have led to duplicate lean projects. As one interviewee summarized it:

It [EastManage] has got several projects happening on each of the plants within the group but there is some duplication … it makes sense that those guys could collaborate and pull a project together. (Philip, Plant Manager, EastManage)

Another rationale for collaboration was that a lean project in one department or an area of the business could impact another department. Therefore, in the absence of collaboration, while one department conducted lean a project to improve service processes, another department could experience difficulties because of the lean project. However, in the existence of collaboration among employees, a better view of the lean project and its impact were available for the affected parties to consider. As one interviewee said:

We've got another department… we have created that interaction [collaboration] … I go to them and make sure it’s okay if we implemented this [a lean change] … You might find something that can’t be changed because this is the reason … that liaison [collaboration] between the departments is quite important … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Talking about employee communication and collaboration, the informants reported that, to keep employees informed of the progress of lean projects, their organisations facilitated
information sharing among them across the organisation. The quote below further explains this point:

They hold it [meetings] between themselves … it’s a good opportunity to pass information to them, that's not always done in the past. (Michael, Site Manager, Hinance)

When asked about the communication channels used to disseminate knowledge and keep employees updated on lean projects, the informants reported the usage of multiple channels. Some of them existed before lean. Others were introduced specifically to support lean practices. The common channels amongst the interviewees are tabulated in Table 14.

<table>
<thead>
<tr>
<th>Channels</th>
<th>Evidential quotes from data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant messaging applications such Lync and Facetime</td>
<td>We got Lync … some people who work with PCs all the time. They have access to Lync. The supervisors do and so do the team leaders. (Michael, Site Manager, Hinance)</td>
</tr>
<tr>
<td>Webinar</td>
<td>We use webinar quite a lot … for problem solving sessions … (Sue, Design and Delivery Agent, FineBank)</td>
</tr>
<tr>
<td>Blogs</td>
<td>We have what we call the ‘Weekly Blog’ which is a week of communication that would fairly be typical. (Katie, Lean Leader, FineBank)</td>
</tr>
<tr>
<td>Poster (see Figure 64 and Figure 65)</td>
<td>We do the posters. There are a lot of posters around site. I think posters are the main communication about the CI [continuous improvement] and about lean. (Bill, Head of Communication and Services, HighEnd)</td>
</tr>
<tr>
<td>Email</td>
<td>If there is really important news to share, it will also come out as an email because not everyone looks at the internet [website] every day … (Natalie, Operations Manager, MyFinance)</td>
</tr>
<tr>
<td>Events</td>
<td>We've done Kaizen events on couple of the big areas … (Ian, Distribution General Manager, HighEnd)</td>
</tr>
<tr>
<td>Face to face</td>
<td>We do more regular one to ones now with the staff. (Tatiana, Fraud Team Leader, Hinance)</td>
</tr>
<tr>
<td>Board</td>
<td>We've got the graphite board … it's worked really well … it also gives us the opportunity to write back to those colleagues because</td>
</tr>
<tr>
<td>Method</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Facebook group</td>
<td>… they are using now, the business transformation team, the Facebook page … You have to be invited to join rather than just being open … (Andy, Head of Asset Management, EastManage)</td>
</tr>
<tr>
<td>Intranet</td>
<td>… within our system, we have a page called think-tank, and, all teams that set under operations have their own site … everyone within our company can see it, and, it tells you what work that team deals with, what else they did wrong, so, you have a true picture of what is actually happening here at any moment in time. (Natalie, Operations Manager, MyFinance)</td>
</tr>
<tr>
<td>Website</td>
<td>There is a lot of communication that comes out from the business; but that 99% of that would come via email or is on our internet website … (Natalie, Operations Manager, MyFinance)</td>
</tr>
<tr>
<td>Phone</td>
<td>We speak to staffs on telephone … (Bill, Head of Communication and Services, HighEnd)</td>
</tr>
<tr>
<td>Newsletter</td>
<td>… they produced a lean newsletter once a week on a Friday. I think it used to go out which provided a progress update of all things lean related to the area. (Steve, Programme Support Manager, FineBank)</td>
</tr>
<tr>
<td>Networking lunch</td>
<td>… the people who have done brilliantly well … plus the people who have gone their 1bs [lean practitioner training course], we would go for dinner … they all talk about their experiences … we'll do it every six months. (Jenny, Head of Operational Services, MyFinance)</td>
</tr>
</tbody>
</table>
Figure 64: An example poster to support lean practices at EastManage
Figure 65: An example poster of 5s to support lean practices at EastManage
However, beside the use of these channels, the findings also suggest that the organisations benefited from several employee-employee or employee-manager meetings to support lean. While the purpose of the channels was to keep employees informed of lean, the purpose of the meetings was to bring employee-employee or employee-manager together to work on lean projects. These meetings mainly were:

- Visual meetings (see Figure 66) were to present facts and figures of lean projects in a visual format to management to understand:

  We've changed the way we have … daily production meeting… to now a very visual meeting. (Philip, Plant Manager, EastManage)

![Figure 66: An example of visual meeting at Hinance](image)

- Performance meetings (see Figure 67) were held between management and teams to discuss progress on lean projects:

  … team performance meetings happen every day. You have key performance indications as a team based … it's an opportunity to look at yesterday’s performance … We also sent people from different departments to people’s performance meetings … (Tim, CUI Supervisor and Site Lean Agent, Hinance)
Figure 67: Performance meeting at Hinance

- Site steering or management meetings were held, usually, among managers and resource custodians. Employees, who were the owners of CI ideas, also, participated in such meetings. The main purpose of these meetings was to discuss lean projects that were big in scale to be discussed in lean teams:

If it's a bigger project than something that they can do, it's passed on to the monthly site steering with the management team. (Andy, Head of Asset Management, EastManage)

- Champion meetings were held by lean champions. They were chosen employees as the responsible people of lean tools and projects. They were from different functional groups:

They [lean champions] have their own meetings. They're run by someone from lean … a sort of share experiences, share problems, share issues… (Jenny, Head of Operational Services, MyFinance)

- Huddle meetings were small circle gatherings of employees and their managers to discuss daily performance issues (see Figure 68). These meetings were usually short, between 10 - 15 minutes. They were held in the mornings or at the start of a shift—when the start of a shift was not 9:00 AM:

Huddle is just when each morning they all get together in a little hub, they talk about the performance of the day, what their priorities are for the day, what their success were yesterday, any issues that are arising that need resolving and this sort of thing. Typically, ten minutes each morning where the team reflect on yesterday, resolving problems and planning for today. (Katie, Lean Leader, FineBank)
Figure 68: Discussing tasks in huddle meeting at MyFinance

- Bug meetings were meetings to uncover waste in any format or, simply, what ‘bugs’ an employee to do their job:

  Once a week, they'll have a bug meeting … they will go through TIM WOOD… (Michael, Site Manager, Hinance)

- Problems and countermeasures (PCs) meetings were held to discuss root causes of issues and what actions were necessary to solve them:

  … problems and countermeasures … the team manager would ask the staff for ideas in terms of what they could do better, the countermeasure, the solution to that. (Steve, Programme Support Manager, FineBank)

- Briefings were held to bring employees up to the speed of lean service by providing them with a short and concise summary of lean projects:

  … we’ll get two hundred colleagues together and will deliver a monthly brief … to tell them about what improvements we have made … what’s coming up soon … (Robert, Depot Operations Manager, HighEnd)

- Other meetings were held to support lean practices:

  … in some areas we've, also, been able to introduce a sort of dropping coffee mornings … your centre manager will sit in the coffee area, she got two to three individuals asking … (Mike, Design and Transformation Lead, FineBank)

    All the depot leads and DOMs [depot operations manager] will all attend a two-day conference to … how we are doing, you know. (James, CI Lead, HighEnd)

In summary, for the informants in this study, employee communication and collaboration was crucial to support lean practices. Their organisations benefited from this practice to share information on projects and promote collaboration among employees to work on these projects. For that purpose, the findings also suggest that several communication channels were used to keep employees up-to-date with information on lean service.
4.3.14 Labour relations

Another recurrent theme is labour relations (see Figure 69). This theme denotes that the case study organisations capitalised on labour relations to engage unionised workers in lean service. To do that, they (i) involved unionised workers in lean practices, (ii) pitched lean changes at their level, (iii) educated them on lean practices, (iv) created a sense of urgency for changes and (v) gave them the choice of reverting to old ways if lean ways did not work. This section, using evidential quotes from the data, discusses this theme.

![Figure 69: Labour relations screen snip from NVivo project](image)

The findings suggest that the case study organisations not only involved non-unionised workers in lean service but also their unionised workers. They utilised labour relations through several strategies to improve their buy-in to lean practices. However, a note of caution is due here since the organisations did not have the same level of unionised workers. FineBank, EastManage and HighEnd were heavily unionised:

We are very heavily unionised … we have various forums where the unions are involved. We have a monthly meeting with the shop stewards on-site. (Andy, Head of Asset Management, EastManage)

I think it all depends on which one you are talking to. If it’s the drivers’ one, they are always quite militant … (James, CI Lead, HighEnd)

Whereas MyFinance and Hinance were less unionised:
Interestingly, we don’t really have many people in trade unions now. The ones that are artificially been there for years … get involved [in lean] … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

To support lean service, several informants reported that their organisations, especially the heavily unionised ones, had used several strategies to orient their unionised workers to support lean.

First, they heavily involved unionised workers in lean practices. Commenting on this, some of the interviewees stated:

We have a quarterly meeting with the union … they're fully informed of any changes … (Andy, Head of Asset Management, EastManage)

The unionised workers are involved in the early stages … this is the figure that we're now working to … providing that's a fair representation of what happens on a day to day bases. (Ian, Distribution General Manager, HighEnd)

These views surfaced mainly in relation to that the organisations involved unionised workers in lean practices to allow an ‘honest conversation’ on their lean programmes with them. As one precisely worded it:

… ensuring that unionised workers are involved in all activity- whether this is by actual participation or by, FYI; engagement is key and open and honest discussions. (Amy, Change Manager, HighEnd)

Besides, the findings also suggest that involving them in lean was crucial for the embedment of lean practices, especially when the workers were the ones who worked directly on service delivery processes. As some participants commented:

… we introduced shop marking as a role … it had no KPIs … the best approach to take was to use a union representation, themselves, to help us doing the job … to, then, help us build a supportive documentation of people training on these initiatives … (Chris, Warehouse Dayshift Shift Manager, HighEnd)

… you work it through with the staff member, therefore, there is nothing for them … to say: I don't like this because it is their proposal. (Mike, Design and Transformation Lead, FineBank)

Together, these evidential quotes provided important insights into the utilisation of labour relations to support lean. The organisations heavily involved unionised workers in lean to win their support. As some informants confirmed this understanding:

… they should be involved … whether they want to or not … (Dayle, Senior Operations Technician, EastManage)

We do have a colleague, uni. member, sitting on the CI … when there is a change … they've got an opportunity, then, to have their saying … (Bill, Head of Communication and Services, HighEnd)
Second, the findings also suggest that the organisations pitched lean service and any relevant changes to day to day work at the level of their unionised workers. The (unionised) organisations highlighted and materialised the benefits of changes that mattered the most to unionised workers. As some of the participants clearly referred to this approach:

… anytime that we are trying to implement something … to union members … to get that across is to make relative at the pitch … relative to the colleagues … (Chris, Warehouse Dayshift Shift Manager, HighEnd)

… you can steer in a way that it is about making peoples’ jobs easier, more interesting, giving them more skills, probably, also, making their job safer, then, I can't see how the union could argue against any of those points … (Peter, Maintenance Manager, EastManage)

The findings demonstrate that how lean was pitched and how its benefits were materialised significantly impacted the buy-in of the unionised workers to lean. Talking about pitching lean service, some of the interviewees commented:

… if we can show them the quick wins and the benefits … there is no reason why unionised workers shouldn't come on board with it. (Philip, Plant Manager, EastManage)

The unionised workers are quite happy that we've got structure … by looking at lean, needing to release people for training and development to do projects … (Andy, Head of Asset Management, EastManage)

For that reason, it was suggested that materialising the benefits of lean at the early stages of lean deployment increased the utilisation of labour relations to support lean. The comment below further illustrates this point:

… just talk to them in the early stages, make sure, they are on board with what you wanna do and just sell the benefits to them. (Robert, Depot Operations Manager, HighEnd)

There were also some suggestions that the nature of the benefits for them, hugely, impacted how much support they were willing to contribute to lean practices. For example, several interviewees said:

… it really depends on what it is that you are trying to change and to try to understand what are those benefits to the colleagues, get the unionised workers to buy-in to that because they will, then, sell it to the colleagues themselves. (Robert, Depot Operations Manager, HighEnd)

… you would expect them to be quite negative … if you sell the reasons why you're doing this … then, you normally find you get a better response that are much more positive responsive from them than if you don't … it's always been around if you engage them early, you have a chance to make it work. If you engage them too late, they will be naturally defensive … (Paul, Managing Consultant, MyFinance)

Third, some interviewees agreed that their organisation educated unionised workers on lean by sharing information on lean projects with them and enrol them in lean-related training
courses. They reasoned that sharing information helped them understand and make sense of why certain lean changes were necessary. The quotes below further clarify this point:

"It could be that they are not aware or … that they don't know about it … perhaps ignorance towards it." (Dayle, Senior Operations Technician, EastManage)

"You have to communicate change to our colleagues [unionised workers] to ensure that they understand the reason for it …" (Amy, Change Manager, HighEnd)

They also argued that enrolling them in lean-related training courses allowed them to immerse in lean service. The quote below further clarifies this point:

"… most of us, in fact, on site, are in the union … some union members are Green Belt, others are getting in around committees regarding lean." (Dayle, Senior Operations Technician, EastManage)

Fourth, the participants also reported that their organisation created a sense of urgency for lean service. They felt that their organisation had been portraying that employing lean practices were vital to keep their organisation in business. Accordingly, if their organisation were kept in business, they would keep their jobs. The comments below explain this point:

"That’s the diplomatic way of putting it [to create a sense of urgency] [Laughing] because you only can give what you’re given at the end of the day." (Tim, CUI Supervisor and Site Lean Agent, Hinance)

"You need to change your mind-set in terms of rather than what’s good for the business to how does that benefit a colleague, so, whether that be long term success of the business or … profitability of the business … we all get job security … that’s the way you need to get people." (Robert, Depot Operations Manager, HighEnd)

Fifth, there are also suggestions in the data that when a lean change received continuous resistance from unionised workers, they were given a choice. They could revert to old ways if old ways proved better than the lean ways of doing their work. As one interviewee put it:

"… I think it was like, well, let's try it, if it doesn't work, we revert back to the old way of doing it." (Mathew, Transport Shift Manager, HighEnd)

This quote also highlights that, sometimes, there was back and forth in the communication until a lean change was finally accepted. Talking about this, some informants also suggested that communication is a key to understand lean changes. As they said:

"It's all about talking to the unions, talking about change." (Andy, Head of Asset Management, EastManage)

"… I think communication is a key … it’s about doing it upfront and with the right people … we’re unionized, we have to engage with the unions before we can implement a change to get their buy-in, otherwise they just make it harder to implement." (Robert, Depot Operations Manager, HighEnd)
Taken together, many of the participants agreed with the statement that their organisations utilised several strategies to obtain the buy-in of the unionised workers to support lean practices. They involved them in lean, pitched changes at their level, educated them, created a sense of urgency for changes and gave them a choice of reverting back to old ways. As a result, this discussion and the evidential quotes suggest that the (unionised) organisations used labour relations to support lean practices.

4.3.15 Employee motivation

Another recurrent theme from the data is employee motivation (see Figure 70). The case study organisations motivated their employees to support lean service. Employee motivation, in this context, was through enrolling them in accredited lean training courses, involving them in lean projects and recognising their contribution by top management during 'Royal visits'. And so, employees in the organisations were motivated to conduct lean projects and celebrate the success of their projects with co-workers. This theme is discussed in this section and evidential quotes are used to support it.

![Figure 70: Employee motivation screen snip from NVivo project](image)

Talking about employee motivation, several informants remarked that it was crucial for their organisation to utilise it to improve the buy-in of employees to lean. They suggested that this practice combined their efforts to support lean service. In doing so, their organisation used several approaches to motivate them towards lean. As one interviewee put it:
… what can we do to make you [an employee] more motivated and they might say: Oh, … can I have some training on rigid truck … we can do that, but we need to see people consistently in good performance, so, that's how we keep them motivated by giving them different skills. (Ian, Distribution General Manager, HighEnd)

Hence, the participants generally demonstrated that to activate the psychological force and intrinsic motivation of each employee, their organisation had:

1. enrolled them in lean accredited training programmes that led to lean certification.
2. provided them with resources to take on lean projects and convert their improvement ideas to projects.
3. recognised their lean-related contribution and encouraged them to showcase their contribution during 'Royal visit' events (explained hereunder).
4. allowed them to take part in lean-related voluntary work and projects across their organisation.

These bullet points are explained hereafter. First, the findings suggest that one way to motivate employees was to enrol them in accredited lean training programmes. Four of the organisations (MyFinance, Hinance, EastManage and HighEnd) had internal accredited lean training programmes for their employees. Attendants were provided with an accredited lean certificate upon the completion of a programme. The informants felt that obtaining such a certificate was very motivating for them to engage in lean service. The comments below further illustrate this point:

... we've got some internal lean courses that you can attend ... we always heavily encourage ... the team members to go on it ... you can come away with the certificate and look, I'm lean accredited ... (Dan, Assistant Team Leader, MyFinance)

The team [lean team] will issue a certificate for them [attendants of training programmes] ... that would be mentioned in the ... recognition day ... (Michael, Site Manager, Hinance)

... it was about eighteen months ago now, that's where colleagues, they've got an actual qualification in lean ways of working ... (Mathew, Transport Shift Manager, HighEnd)

Second, the findings also suggest that another way to motivate employees, to work towards lean, was to provide them with resources to take on lean projects and convert their improvement ideas to projects. As the interviewee below concisely described it:

... we have one of our electricians that led the improvements ... he was given time and to have meetings with other members of his team to be up to implement ... (Peter, Maintenance Manager, EastManage)
Consequently, conducting a lean project motivated employee in, at least, two ways: (i) a ‘successful’ project contributed towards their 1b certification (further details in 4.3.7 Training) and (ii) they could progress one grade in their salary grade.

The third approach was that employees who conducted lean projects were encouraged to showcase their projects in 'Royal visit' events. ‘Royal visit’, as a concept, was used by some of the informants to mean the visit of the CEO or management team to the shop floor. During such visits, the executive members were guided through the details of lean projects conducted by employees. The quotes below further explain this point:

... you've been on the pick up this week ... the rate is 178, you're 182, well done fella, keep it going ... a bit of pat on the back ... (Ian, Distribution General Manager, HighEnd)

... obviously the manager knows about, the senior manager knows about it, [name of a person] knows about it, the Ops Director, so, some big heads ... saying, look at our amazing people here, look what we've done, there's a change maker (Jenny, Head of Operational Services, MyFinance)

The fourth method to motivate employees was to allow them take part in lean-related projects across their organisation. The informants felt this had motivated them to engage in lean projects. The findings also suggest that although the organisations strongly encouraged them to engage in lean projects; they left that as a voluntary decision. The rationale behind it was to lessen pressure on employees to buy-in to lean. As some of the participants commented:

We ask for volunteers ... generally, when people come up with ideas ... we'll say to them ... What do you need? I need a two, three colleagues ... a quarter of the ideas are implemented that way. (Ian, Distribution General Manager, HighEnd)

... we don't force people to get involved with it [a lean project] ... we ask for volunteers. (Peter, Maintenance Manager, EastManage)

Overall, for the informants of this study, their organisation motivated them by getting them involved in lean service. To do that, they were awarded lean certifications, allowed to conduct own lean project, encouraged to showcase their contribution to management to see and involved in lean projects across their organisations (voluntarily). The discussion and the evidential quotes, together, suggest that the organisations used employee motivation to improve the buy-in of their employees to lean.

4.3.16 Employee involvement

Another recurrent theme in the interviews is a sense amongst the interviewees that their organisation improved their buy-in to lean by involving them in lean service (see Figure 71). This practice helped employees to understand lean practices better, get opportunities to share
CI ideas with management and feel as valuable assets in lean service. They suggested that their organisation had used several strategies for that purpose such as getting them closer to each other and management, enrolling them in lean awareness sessions, releasing them to get involved in lean projects and involving them in lean focus groups. This theme is discussed in this section and evidential quotes are used to support it.

![Image: Employee involvement screen snip from NVivo project](image)

**Figure 71: Employee involvement screen snip from NVivo project**

The findings suggest that the organisations involved their employees in lean service throughout lean maturity stages (see Figure 72). In doing so, they assigned work areas to employees to improve using lean tools and techniques. They also assigned them lean tools and techniques to promote across their organisation. As one interviewee put it:

> What we found is that by allocating areas to everybody … we started to see people to start: ‘Oh, great!’ We can get involved. (Andy, Head of Asset Management, EastManage)

Many informants felt that involving them in lean service encouraged them to act positively towards lean practices. They remarked that employee involvement was a crucial element of lean service because it:

- gave them hands-on experience and helped them appreciate lean practices:

  > … you gotta get everyone on board. (Dayle, Senior Operations Technician, EastManage)

- provided them with an opportunity to share their continuous improvement ideas with their colleagues and management:
I would like to see a lot of involvement because it is their idea … They are working in that environment. They are doing that job, so, they are the experts, not somebody sitting in office and typing emails. (Bill, Head of Communication and Services, HighEnd)

- allowed them to perceive their contribution to lean service as valuable and significant:

  ... getting your staff involved as much as possible … everybody likes to know what's going on … if you're making them feel part of it, I think, that's in the end where our success came … (Tatiana, Fraud Team Leader, Hinance)

*Figure 72: An employee involved in Process Mapping at Hinance*

Therefore, the informants, overall, explicitly referred to the criticality of employee involvement to support lean practices. They explained that employees need to be fully immersed in lean for an effective lean journey. For example, the quotes below further explain this point:

  If you can't engage these people, you won't make an effective change … they are involved in the whole process. I think that is how CI should work. (Bill, Head of Communication and Services, HighEnd)

  Let them almost drive it [lean] and get them involved at the very early stage (Peter, Maintenance Manager, EastManage)

The findings also suggest that employees who were involved in lean practices had a better buy-in to lean practices and were very positive about them. One possible explanation from the data was that involved employees perceived their roles to be significant and valuable to support lean. The comment below further illustrates this point:
I mean everybody is coming down now because everybody is getting involved but initially there was quite a bit of resistance. (Dayle, Senior Operations Technician, EastManage)

There were suggestions that the organisations used several strategies to involve employees in lean practices. The main strategies that were reported were the following:

- To facilitate for employees to submit a proposal of their continuous improvement idea to CI Council or management team for consideration:

  If they've got … a new idea, we will discuss it and we will trial the idea as well. If we find that's brilliant … we try to involve them [employees] as much as possible … once it is simply acted, they will get recognise for it. (Tatiana, Fraud Team Leader, Hinance)

- To involve them in focus groups which suggest improvement ideas to support lean service:

  … if you are listening to your people in the first place, they feel like they can give a suggestion, they feel like they can be heard… we do a lot of what we call listening groups, focus groups. (Ian, Distribution General Manager, HighEnd)

- To enrol them in lean-related training courses to enable them to get involved in lean projects across their organisation:

  They [employees] are involved by being involved in the training courses … That would give them insight into lean, and, then, for certain individuals, they would go for the next level of training … all of a sudden, they can get involved in a lot more. (Natalie, Operations Manager, MyFinance)

- To translate lean jargons to terminologies familiar to them to understand:

  … for me is more how do we change the lean language to make it fit with the colleagues, so, rather than get the colleague to talk like a text book, how do we convert the text book into label and terms for the colleagues … (Robert, Depot Operations Manager, HighEnd)

- To release them to get involved in lean projects of their choice:

  I think there are a couple of things. One getting them involved in their project … but, also, it’s around releasing them of the jobs, sometimes, if they've got some information gathering to do or something to type up or anything like that … I think the two engagement things, so, giving them the time to do the job or the change or looking to the change and letting them attend the meeting where the decisions are being made. (Bill, Head of Communication and Services, HighEnd)

- To involve them in training opportunities that allow them to become the sole expert of a lean tool or technique in their organisation:

  … we are … giving people opportunities to champion a particular type of things … (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Taken together, the discussion and the evidential quotes suggest that the organisations used employee involvement to support lean service. This practice helped employees to understand
lean better, get opportunities to share CI ideas with management and feel as valuable assets in lean service. The organisations used several strategies for that purpose such as getting employees and management closer to each other, enrol employees in lean training sessions, release them to get involved in lean projects and involve them in lean focus groups.

4.3.17 Employee empowerment
Another recurrent theme in the data is the utilisation of employee empowerment to support lean practices (see Figure 73). The findings suggest that the organisations encouraged their employees to challenge the status quo in their organisation. To do that, they were given autonomy and empowered to improve their work and workplace and use their discretionary behaviour to act in favour of lean practices. The findings also suggest that self-directed work teams were integrated in the hierarchy of the organisations (see Figure 74). This theme is explained in this section along evidential quotes from the data.

![Figure 73: Employee empowerment screen snip from NVivo project](image)

When asked about employee empowerment, the participants were unanimous in the view that their organisations allowed them greater discretion and provided them with more resources to conduct lean projects. They emphasised that management share information on lean projects with them. And so, they felt that their organisations encouraged them to challenge the status quo in their origination. As one of the participants clearly stated:

… we’ve got to empower the workforce to be involved, making decisions … (Andy, Head of Asset Management, EastManage)
However, opinions were differed as to why employee empowerment had been used by the organisations to support lean. Some felt that management shared information of lean projects with them because without this information they were unable to improve their workplace. Others suggested that it is because employees own the data and know-how of how service delivery processes are conducted. Accordingly, employees own the data that prove relevant to improve service delivery processes using lean practices. Therefore, without empowering them, lean service would be incomplete and limited. The comments below further explain this point:

The guys own that data … they put resolutions in place … we’ve got to empower the guys on the shop-floor. (Andy, Head of Asset Management, EastManage)

… we give people the framework and the tools to do something by themselves. (Forza, Transformation Manager, HighEnd)

We give people the opportunity to put their own thoughts forward. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

The findings suggest that the organisations empowered their employees with the expectation that they utilise lean tools and techniques to improve their processes, solve problems and improve service delivery. As the quote below summarises this understanding:

They've been empowered to solve the problems that they saw every day [...] look for the problems and to put resolutions in for those problems ... what they do is they own the data, measure the data and then they're empowered to put the corrective actions in place or to create projects. (Andy, Head of Asset Management, EastManage)

For that reason, it can therefore be assumed that the organisations empowered employees to support lean service because they owned the data of service delivery processes. This data was unavailable for the organisations.
To empower employees, the findings suggest that, in general, four main approaches were used by the organisations:

- Employees were provided with means to share continuous improvement ideas and information with management team.
- Employees were provided autonomy to challenge the status quo in their organisation.
- Management used self-directed teams and bottom-up approach to conduct lean projects.
- Employees were assigned the responsibility of a process and were encouraged to take ownership of their continuous improvement ideas.

These bullet points are discussed hereafter. First, the organisations provided their employees with several channels to share their improvement suggestions and ideas with the management team. Therefore, employees had a platform to exchange ideas with the management and became part of the implementation of their improvement ideas. Commenting on this, some of the interviewees stated:
… it's [HighEnd] given the colleagues a platform to suggest ideas to be taken on board by the management team … I think it has given them a platform to say I have got an idea, there is a problem and I think I have got a solution for it … (James, CI Lead, HighEnd)

… from anyone, even the post room, right up to the senior management, if you have a good idea, this is how you do it … (Jenny, Head of Operational Services, MyFinance)

Second, the organisations provided autonomy and empowered employees to challenge the status quo in their organisation. They were permitted to question why they were conducting a task in a certain way; why they did certain aspects of a task; how they could improve how they worked. However, the findings also suggest that challenging the status quo was not a chaotic endeavour. It was in a systematic way. Employees were enrolled in lean training sessions to use lean tools and techniques to challenge the status quo. The evidential quotes below further explain this point:

I think, years ago, we weren't encouraged to challenge. Whereas, now, I want people to challenge what we're doing every day rather than just accepting, well, this is what we do, this is how we do it, but, yes, that may be how we do it, but does it have to be done that way … It's empowered people to do more and to challenge more about what is they do every day … (Natalie, Operations Manager, MyFinance)

Third, the organisations also integrated self-directed work teams into the hierarchy of management i.e. moving away from a strict hierarchy to support lean service. Self-directed work teams were saving management time and financial resources in working on lean projects. They self-managed their projects and had direct access to management to troubleshoot issues. The comments below further clarify this point:

It's [self-directed work teams] taking the managers away from the day to day [micromanagement], allowing them to be more strategic and allowing the guys on the shop-floor to look after the day to day. (Andy, Head of Asset Management, EastManage)

It's almost like a bottom-up management rather than a top-down management. (Tim, CUI Supervisor and Site Lean Agent, Hinance)

Fourth, the organisations also assigned employees as the custodian of lean tools, techniques, processes and standardisation documents. The findings suggest that every process or lean tool had an owner as a custodian. The custodians were responsible in developing, improving and looking after their processes or the utilisation of a lean tool. They worked closely with their colleagues for that purpose. This way, the ownership of improvement shifted from management to employees. The quotes below further illustrate this point:

Each of the set has an owner; so, each of the standardization documents has an owner. (Mike, Design and Transformation Lead, FineBank)
… the people who come up with good ideas that are going to improve our processes onsite and make life easier, and, these would be recognised as people’s opinions. (Peter, Maintenance Manager, EastManage)

Overall, the discussion and the evidential quotes suggest that the organisations utilised employee empowerment to support lean. In doing so, they encouraged management and employees to exchange continuous improvement ideas. They also shared information on lean projects with employees, empowered them to challenge the status quo, integrated self-directed work teams in the hierarchy and recognised employees as the custodians of lean tools and techniques.

4.3.18 Employee health and safety

Another interesting theme from the data is employee health and safety (see Figure 75). To support lean practices, some of the informants reported that their organisation had taken actions to maintain employee health and safety. These actions ranged from encouraging and allowing employees to take part in health and safety meetings to balancing employees’ workload and making their job safer and less stressful. This section discusses this theme and explains it using quotes from the data.

![Figure 75: Employee health and safety screen snip from NVivo project](image)

Most of the informants agreed that health and safety of employees was a crucial element of lean service. For that purpose, team leaders were normally expected to ensure that employees were not stressed when they were involved in lean projects. To stay safe, team leaders also
encouraged employees to get involved in health and safety awareness meetings. They also believed that employees were the ones who could help them with insights of how their jobs could be made safer and working environment could be healthier.

During one of the interviews, the interviewee had to go to a health and safety meeting immediately after the interview:

… we got a health and safety meeting today. (Dayle, Senior Operations Technician, EastManage)

This indicated the criticality of this practice to support lean. There was a perception among the informants, in general, that a safer and healthier working environment encourages employees to come to work every day. This is also clearly echoed in the data. The quote below clearly explains this point:

It's about making sure that people come to work and enjoy their type of work, they also stay safe and save time. (Chris, Warehouse Dayshift Shift Manager, HighEnd)

Further, they also agreed that employee health and safety was utilised by their organisation in several ways to support lean. First, the findings suggest that the organisations provided their employees with health and safety facilities to improve their working environment. As one interviewee put it (also see Figure 76):

… the senior management team will … give them [employees] health and safety facilities …
(Robert, Depot Operations Manager, HighEnd)
Figure 76, for instance, clearly guided employees about health and safety of waste treatment area. As the photo (taken during a site visit) indicates, ‘green’ denoted that the level of chemicals of Demin, HCL and Caustic were okay. There was also an ‘orange’ colour to indicate that the chemicals need to be reordered. However, ‘red’ clearly instructed employees to inform a shift manager. Informants at EastManage suggested that these visual aids to promote health and safety were introduced after the employment of lean.

Second, the findings also indicate that freeing employees to engage in lean practices, 'trial and error' improvement ideas in their workplace and give them time to conduct lean projects decreased pressure and stress on them. As one of the interviewees stated:

… as a manager, it's me making sure that they get that time … to go to do this 5s activities or some other continuous improvement activity. (Philip, Plant Manager, EastManage)

Third, the findings also note that moving surplus human capacity among teams to avoid employees being overloaded with work improved their health and safety in lean service. One explanation for this was that an overloaded employee experienced stress and, thus, health
issues. This was particularly the case if one group had unexpected absence. As the quote below further explains this:

… green numbers are plus hours … red numbers are minus hours … we're trying to give green hours to where the red hours are … the management will go back to the team and he will say: Hi, could you jump in to the other team and help them out. (Dan, Assistant Team Leader, MyFinance)

Fourth, the participants also indicated that employee health and safety was a selling point of lean service from their organisation to get their buy-in to it. As some of them stated:

… to make sure that it’s a safer place to work … (Robert, Depot Operations Manager, HighEnd)

Once a month, I'll do a presentation in here … I will tell them, how we're doing as a site in terms of health and safety … (Ian, Distribution General Manager, HighEnd)

Fifth, the findings also suggest that health and safety was one of the factors that contributed towards the balanced scorecard of some of the organisations. For instance, EastManage had health and safety as a KPI of measuring organisational excellence (see Figure 77). The quotes below also explain this:

There's also measures in there around things like, you know, raising risk events [health and safety] … (David, Lead Lean Consultant, MyFinance)

Things related to the wellbeing. (Sue, Design and Delivery Agent, FineBank)

The emphasis on employee health and safety was, also, evident in the many visual posters observed during the site visits. Figure 77 presents an example of these visual posters to support this statement:
In summary, the organisations utilised health and safety to support lean service. Employees’ health and safety was looked after in several ways and was one of the measures on the balanced scorecard of some of the organisations.

### 4.4 Summary of chapter

The case study organisations utilised 18 enabling HRM practices to support lean service. These practices were: recruitment and selection, role profiling, capacity planning, absence management, retention and release, succession planning, training, career development, performance management, reward and recognition, groups and teamwork, employee voice, employee communication and collaboration, labour relations, employee motivation, employee involvement, employee empowerment and employee health and safety. By utilising these practices, they oriented their employees towards lean and engaged them in its practices.
Chapter 5: Discussion

This chapter places the findings in the body of literature. In doing so, the researcher discusses the human element of lean service and how such element is managed and oriented to support lean practices by utilising HRM practices. After that, the lean relevant HRM practices are debated. Then, the proposed lean-specific HRM bundle and the PDCA framework are discussed. This followed by a discussion of the theoretical support of bundling HRM practices. Then, the chapter ends with a discussion on criticisms and advantages of bundling HRM practices.

Chapter outline

5.1 Introduction ............................................................................................................. 238
5.2 The human element of lean service ........................................................................ 238
5.3 Enabling HRM practices supporting lean service ................................................... 241
5.4 A lean-specific HRM bundle .................................................................................. 254
   5.4.1 Bundling HRM practices .................................................................................. 254
   5.4.2 A specific HRM bundle to support lean service .............................................. 258
   5.4.3 Criticisms of bundling HRM practices ............................................................ 264
   5.4.4 Advantages of bundling HRM practices ......................................................... 267
   5.4.5 PDCA framework with proposed HRM bundle integrated ................................ 268
5.5 Summary of chapter .............................................................................................. 271
5.1 Introduction

This thesis has explored how service organisations utilise enabling HRM practices to support lean practices. The qualitative data, gathered for this study, indicated that only a specific group of HRM practices support lean service (see Chapter 4: Findings).

The findings confirm the significant role that enabling HRM practices play in lean service. Such role is not to be overlooked by service organisations. These findings add to previous scholarly works (discussed hereafter) by suggesting answers to: (i) What HRM practices are utilised to manage the human element of lean service? (Section 4.3 and 6.3) (ii) How these practices are utilised? (Section 4.3.1–4.3.18 and 6.3) (iii) Why these practices are utilised to align the human element of lean with lean targets (Section 4.4 and 6.3)? To understand how the findings add to the exiting knowledge, they are placed in the body of literature in the rest of this chapter.

5.2 The human element of lean service

The findings highlighted the significance of the human element in lean service. The human element, in this context, refers to the interactions of employees with lean—whether lean is a set of tools and techniques or principles (Sawhney and Chason, 2005). Such interactions allow employees of service organisations to integrate lean practices to their day to work and service delivery processes.

The evidential quotes in Chapter 4: Findings exemplified the criticality of the human element in lean service. Three of such evidential quotes are re-used hereunder to emphasize this statement:

I think the biggest issue is getting everyone involved, getting an understanding for everybody. (Andy, Head of Asset Management, EastManage)

Without engaging our colleagues, we fall short of successfully implementing and sustaining any lean led change. (Amy, Change Manager, HighEnd)

I have to say that we’ve probably spent 80% of the time with minority of the people that don’t buy-in to it [lean]. (Philip, Plant Manager, EastManage)

Therefore, without a proper consideration of the human element lean fails (or at best is limited to the application of tools and techniques). This line of thinking is also consistent with that of previous scholars (e.g., Dahlgaard and Dahlgaard-Park, 2006; Sparrow and Otyae-
Ebede, 2014). Sawhney and Chason (2005, p. 77) evidently confirm that “There are various outlooks on the role of people in Lean, but a literature review reveals agreement on the importance of the human element.”

The human element, its significance was demonstrated through the findings and in line with the previous understanding (e.g., Bortolotti, Boscari and Danese, 2015; Hadid, Mansouri and Gallear, 2016), is a key ingredient of a successful lean programme. The existing literature agrees that lean is a complex interrelated system of soft and hard practices (Bortolotti, Boscari and Danese, 2015; Hadid, Mansouri and Gallear, 2016). The findings, consistent with the existing literature, suggest that the implementation of lean hard practices is only achieved through employing lean soft practices—such as employee training (Bortolotti, Boscari and Danese, 2015; Gaiardelli, Resta and Dotti, 2018). Employing lean soft practices gives an organisation a humane orientation which contributes to a specific organisational culture profile that characterises successful lean implementation (Bortolotti, Boscari and Danese, 2015). Consequently, a humane orientation in a lean programme gives advantage to an organisation over another when implementing operational excellence programmes such as lean (Bortolotti, Boscari and Danese, 2015). The rationale for such an understanding is simple: operational performance of an organisation is influenced by the behaviour of its employees (Gaiardelli, Resta and Dotti, 2018). One of such a behaviour is continuous improvement behaviour (or CI behaviour) (Hirzel, Leyer and Moormann, 2017). Consistent with the literature, this thesis therefore argues that employing lean soft practices not only helps with creating a nurturing environment to increase employees’ CI behaviour but also enhances the implementation of lean hard practices and reduces employee resistance to changes that result from lean (Bhasin, 2012; Bortolotti, Boscari and Danese, 2015).

The human element is significant in lean service for several reasons. First, lean is knowledge-intensive, meaning that it only happens when knowledge of employees is utilised (Drew, McCallum and Roggenhofer, 2004). Such knowledge could be the knowledge of the service delivery processes or of lean tools and techniques. This is particularly the case in service organisations (Abdi, Shavarini and Seyed Hoseini, 2006). They are often labour intensive and, therefore, the human element makes or breaks lean.

Second, one of the main principles of lean is ‘reduction of waste’ (Womack and Jones, 2003). Waste is not only material waste; human behaviour also creates waste (Sawhney and Chason,
And so, the human element of lean is vital to be understood, gradually, managed and oriented to support lean service. The absence of such understanding limits the ability of service organisations to reduce waste that results from undesired lean behaviour of employees (Sawhney and Chason, 2005).

Third, lean carries change to service delivery processes and day to day work of service organisations (Bowen and Youngdahl, 1998). These changes create a temporary state of instability (Womack, Jones and Roos, 1990; Forrester, 1995). In such a state, service organisations need to understand the human element of lean if they depend on their workforce to integrate lean practices into service delivery processes (Forza, 1996).

Fourth, the instability that would result from the initial stage of lean deployment might also create resistance from employees (Liker, 1997). Appreciating the human element enables service organisations to involve employees in lean service (Biazzo and Panizzolo, 2000). This involvement encourages employees to work on lean projects and take ownership of these projects (Forza, 1996). Therefore, utilising the human element not only reduces employees’ resistance but also brings employee-flexibility to service organisations to go through the instability period that lean would temporary bring (Liker, 1997).

Fifth, the human element is the indicator of lean sustainability (Dombrowski, Mielke and Schulze, 2011; Lorden et al., 2014). For that reason, the findings recognise that managing and orienting the human element to support lean service not only makes it successful but also sustains it. This understanding is also confirmed by recent research that there is a positive relationship between the human element and lean practices (Shokri, Waring and Nabhani, 2016; Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). A possible explanation for this understanding might be that lean is people-centric (Sparrow, Hird and Cooper, 2014). It has to be driven by people (Forrester, 1995) because employees are better informed in terms of how a service delivery process is to be improved using lean tools and techniques.

However, despite the fact that the human element is vital in lean service, researchers do not agree on a course of action to manage and orient it to support lean practices (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). Further, on a theoretical level, further research is recently requested to understand how to manage the human element of lean and orient it to support lean practices (Sunder, Ganesh and Marathe, 2018).
Therefore, the combination of the findings in this thesis increases existing understanding in that premise. It significantly adds to previous scholarly works in at least two major respects. It clarifies that lean service require a core of effective people management practices and suggests a lean-specific HRM bundle for that purpose. In subsequent sections, these are also discussed and placed in the body of the literature.

5.3 Enabling HRM practices supporting lean service

The most obvious finding to emerge from the data is 18 enabling HRM practices to support lean service. The findings deepen our understanding of ‘how’ and ‘why’ these practices are utilised to manage and orient the human element of lean. This understanding does not only advance previous scholarly attempts but also provides a grounded understanding of enabling HRM practices emerging from real-world that support lean service operations. The rest of this section places these findings in the body of literature.

Moyano-Fuentes and Sacristán-Díaz (2012) categorise publications on the relevance of HRM to lean into four categories: (i) employee commitment to lean, (ii) utilising HRM practices to support lean (iii) implications of lean on HRM practices and department (iv) negative implications of lean on employees. This thesis was an attempt to contribute to the second category “utilising HRM practices to support lean” and to advance previous findings in this category. Moyano-Fuentes and Sacristán-Díaz (2012) and Bamber et al. (2014) identified that this category of lean research is significantly under-researched. In reviewing the literature, Sunder, Ganesh and Marathe (2018) has recently confirmed that this area of research still needs further exploration and investigation. And so, the present study was designed as an attempt to, along the initial motivation of the researcher (see 1.3 Research), answer the various calls from the existing literature. Such calls request further exploration of the HRM-lean relationship (e.g., Taylor, Taylor and McSweeney, 2013; Bamber et al., 2014; Sunder, Ganesh and Marathe, 2018).

They recognise that sustainability of lean practices is achievable only through people who work for an organisation—“the factors that aid the sustainability of lean are mainly people-centric.” (Sparrow, Hird and Cooper, 2014, p. 106) In line with the findings of this thesis, an increase of knowledgeable employees (especially when they are bought into lean practices).
corresponds to an advancement in lean service (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017).

What is interesting from the findings is that enabling employees to accept lean ways of conducting service delivery processes as 'business as usual' not only helps their organisation with successful and sustainable lean practices but also improves their wellbeing (de Koeijer, Paauwe and Huijsman, 2014). Therefore, understanding HR-enabled lean service allows service organisations to utilise lean relevant HRM practices to orient their employees to support lean practices at different maturity stages of lean (de Koeijer, Paauwe and Huijsman, 2014; Netland and Ferdows, 2016).

As the findings indicate, to enable employees to support lean practices, service organisations must address several issues related to people management that arise from lean service (Sparrow, Hird and Cooper, 2014). These issues, for instance, include: (i) training employees in lean-related knowledge and knowhow (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017), (ii) engaging employees in lean service (Bamber et al., 2014), (iii) encouraging employees to use discretionary behaviour to support lean practices (Bevilacqua, Ciarapica and De Sanctis, 2016), (iv) motivating employees to conduct lean projects (Atkinson, 2010) and (v) devolving lean relevant HRM practices to line managers during transition to lean (Gollan, Kalfa and Xu, 2015). In line with the existing literature, the findings therefore suggest that addressing these issues require a proper utilisation of lean relevant HRM practices (de Koeijer, Paauwe and Huijsman, 2014). Overlooking the role of relevant HRM practices not only fails service organisations in orienting their employees to buy-in to lean practices but also makes them unable to ensure that their employees have the required lean knowledge and skills (Bonavia and Marin, 2006; Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017).

Regardless of that previous research (e.g., Sawhney and Chason, 2005) acknowledges the indispensable role of the workforce in lean service, there is a significant ambiguity around how HRM practices are utilised to enable employees to support lean practices. There has not been a significant body of research to advance our understanding in this area (Moyano-Fuentes and Sacrista’n-Díaz, 2012; Bamber et al., 2014; Marin-Garcia and Bonavia, 2015). The review of the literature (see Chapter 2: Literature review) suggested that we understand that HRM practices and lean maintains a multi-level statistically significant relationship (e.g.,
Several scholars have also attempted to answer 'what' HRM practices contribute to this relationship (e.g., Osterman, 1994; MacDuffie, 1995; de Koeijer, Paauwe and Huijsman, 2014). While such attempts are significant, they are limited.

Because of this research, we now understand that HRM practices and lean not only have a statistically significant multi-level relationship but also such relationship reflects contextual and real-world data. The findings suggest that HRM practices foster and sustain lean service at different lean maturity stages. This understanding, while it confirms previous scholarly works (e.g., de Koeijer, Paauwe and Huijsman, 2014), provides an in-depth and contextual detail of the multi-level relationship of HRM practices and lean. It enables us to make sense of such links in service organisations.

One important finding is that there are 18 enabling HRM practices which are relevant to lean service (see Figure 49). Service organisations could utilise them to support their lean programmes. The practices assist with improving the buy-in of employees to lean practices. They are the type of activities that service organisations conduct to manage their human resources and direct these resources towards lean practices.

Consistent with the literature, this research therefore supports the work of scholars who establish links between HRM practices and lean—whether in reviewing literature (e.g., Moyano-Fuentes and Sacrista’n-Dr’az, 2012) or proposing a conceptual model (e.g., de Koeijer, Paauwe and Huijsman, 2014) or suggesting a statistically significant relationship (e.g., Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). This thesis not only supports them but also extends the proposed links they establish. It also advances them by providing real-world and contextual data to explain such links.

1. Recruitment and selection

The case study organisations use recruitment and selection to attract, select, orient and appoint candidates with lean knowledge, skills and experience to fill vacant positions of support, managerial and lean nature. This is consistent with the work of Snell and Dean (1992), Suárez-Barraza et al. (2010) and de Koeijer, Paauwe and Huijsman (2014) in that they have suggested that recruitment and selection is a lean relevant HRM practice. This finding elaborates such understanding by explaining how relevant recruitment and selection
to lean service is and why it is relevant. It is also consistent with the work of scholars (e.g., Gao and Low, 2015) who advise organisations to be selective in their recruitment to support lean practices. One rationale for the selectivity in recruitment is that organisations need to recruit the right candidate with the right calibre to retain them and ensure continuity of lean service (Taylor, Taylor and McSweeney, 2013).

Selectivity in staffing could also denote recruitment freeze (Lindsay et al., 2014) or work intensification (Findlay et al., 2017). However, as the findings suggest, the use of this practice, in this context, should not be understood as using lean as a vehicle to reduce staff numbers; something in the literature labelled as ‘lean staffing’ or ‘de-skilling’ (Carter et al., 2013; Findlay et al., 2017). The findings also do not suggest that such an HRM practice is used to intensify work for employees. On the contrary, service organisations are rather selective in recruiting and selecting candidates with prior exposure to lean practices.

One implication therefore is that recruitment and selection enable service organisations to have the required employee resources (i.e. the required and relevant lean skills, knowledge and behaviour). Candidates with prior exposure to lean are understood by the case study organisations to endorse lean ways of service delivery. However, it is unclear if prior exposure of a candidate to lean encourages them to endorse lean service. The data only suggests that such prior exposure to lean is perceived to be connected to the degree a newly recruit endorses lean practices. Therefore, further research could also be undertaken to investigate whether prior exposure of candidates to lean when they are compared to candidates without prior exposure to lean impacts their endorsement of lean.

2. Role profiling
Service organisations use role profiling to clarify roles, tailor their existing roles and create new roles to fulfil role profile needs of lean service. There are similarities between this finding and those reported by Power and Sohal (1997, 2000b) in a manufacturing context. However, while these scholars suggest that lean brings changes to various role profiles across an organisation aiming at developing a flexible workforce, this thesis suggests that service organisations clarify and tailor their existing roles and create new ones to fulfil role profile needs of lean service.
The understanding of this thesis could be explained by that employees in a service context take the responsibility of internalising lean practices in their area of work (Moyano-Fuentes and Sacrista´n-Díaz, 2012). Therefore, they go beyond the initial hypes of lean service deployment by the management in their organisation (Sparrow and Otaye-Ebede, 2014). They simply are able to foster and impede lean service (Sparrow and Otaye-Ebede, 2014). If they are to support lean service, their roles are to be fluid and tailored to respond to changing circumstances resulting from lean service in their organisation (Duguay, Landry and Pasin, 1997; Spear and Bowen, 1999).

It is therefore likely that such connections exist between role profiling and lean practices whether it is the impact of lean on role profiling (Power and Sohal, 1997, 2000b) or pure utilisation of role profiling to support lean practices by service organisations as suggested by this study. Such increase in the existing understanding serves as an attempt to address calls in the literature (e.g., Moyano-Fuentes and Sacrista´n-Díaz, 2012) that request exploring role profiling to support lean.

3. Capacity planning

Service organisations also move and trade surplus capacity (human resources) across teams and departments to support lean practices. This finding broadly supports the work of other scholars. Previous scholars (e.g., Lorden et al., 2014; Henderson et al., 2016) suggest that capacity planning enables organisations to adapt to fluctuating circumstances and, thus, staff members are not overloaded in such circumstances. It is therefore this practice allows an organisation to move the right level of capacities to fulfil customer needs or support lean projects (Henderson et al., 2016). Such an arrangement also avoids work intensification for employees to speed up lean changes in an organisation (Henderson et al., 2016). It also has other implications such as preventing employees to use their personal time at work to support lean deployment (Angelis et al., 2011).

Consequently, this finding adds to the ones observed in earlier studies (e.g., Lorden et al., 2014; Henderson et al., 2016) by suggesting that service organisations can utilise capacity planning to move and trade surplus capacity across teams and departments. However, a note of caution is due here since we also have knowledge workers in the service sector. This is an important issue for future research to investigate the effectiveness of moving and trading surplus capacity across teams and departments to support lean practices.
4. Absence management

Service organisations use absence management to understand patterns of habitual missing of employees from work and reduce absenteeism. The rationale for reducing absenteeism is to maintain a balanced workload for present employees (Bonavia and Marin-Garcia, 2011). Such insights therefore increase the existing understanding around earlier observations (e.g., Bonavia and Marin-Garcia, 2011; Sangwa and Sangwan, 2017) that a high level of employee absenteeism significantly slows lean integration. Understanding patterns of habitual absence of employees could reveal if such patterns result from high level of stress or musculoskeletal disorders and ergonomic issues or any other health and safety issues in a lean context (Womack, Armstrong and Liker, 2009).

However, using absence management to support lean practices seems to be less effective when we reflect on the findings of Hadjisolomou (2015). He suggests that line managers are unable to act on habitual missing of employees at work because they have restricted authority on the process of absence management. In his study, line managers considered absence management as a mundane exercise. Therefore, it is important to bear in mind that although this thesis finds absence management as a lean relevant HRM practice, the authority of line management, somewhat, dictates the effectiveness of utilising it to support lean practices.

5. Retention and release

Service organisations retain their employees by moving them across teams and release them to work on lean projects. This insight advances the findings of Shook (2010) and Sangwa and Sangwan (2017) that retention of employees is vital to support lean practices. A possible explanation for the vitality of retention of employees to support lean is that it allows continuity of lean projects which is crucial in any lean programme. It is well documented in the existing literature (e.g., Panizzolo et al., 2012) that a high rate of employee turnover negatively impacts the continuity of lean programmes. While other scholars (e.g., Tracey and Flinchbaugh, 2008) suggest that organisations could use strategies such as reward to retain employees, this study adds to this understanding by suggesting that they can cross-train employees and move them across teams to retain them.

6. Succession planning

Succession planning supports lean practices in service organisations. Despite the importance of this HRM practice to support lean, it is not discussed by previous scholars (e.g., de
Succession planning is to identify and develop suitable candidates among the existing workforce to succeed departing members of ‘lean teams’ and key roles. A possible explanation for not being discussed by previous scholars might be that previous scholarly works (e.g., de Koeijer, Paauwe and Huijsman, 2014) have not explored organisational approach in preparing a successor for a key role when the role holder decides to leave their organisation in a lean context. It is likely that for that reason the utilisation of such an HRM practice has not been captured by earlier scholars (e.g., de Koeijer, Paauwe and Huijsman, 2014) as a lean relevant HRM practice.

7. Training
Training and development is generally prescribed in the existing literature to support lean (e.g., Snell and Dean, 1992; Osterman, 1994; Bonavia and Marin-Garcia, 2011). This is because lean deployment is knowledge-intensive and heavily dependent on the skills and knowledge of the workforce of an organisation (Drew, McCallum and Roggenhofer, 2004). This general prescription may also be explained by the fact that previous scholarly works (e.g., Bonavia and Marin-Garcia, 2011) have mainly attempted to establish statistical relationship between HRM practices such as training and development and lean. While such statistical relationship is significant; they are rather difficult to interpret beyond the context of these studies. On the other hand, the findings of this study suggest that service organisations use training and development to equip their employees with lean-related knowledge, skills and expertise in real-world context. This insight, adds to previous work (e.g., Snell and Dean, 1992; Osterman, 1994; Bonavia and Marin-Garcia, 2011), is contrary to reports (e.g., Godard, 1998) that suggest lean programmes deskills employees.

This thesis therefore supports scholars (e.g., Sitzmann and Weinhardt, 2018) who suggest that training and development programmes must follow an orderly sequence of setting training goals, prioritising those goals and striving for training effectiveness. For that purpose, the case study organisations used several lean specific training courses. Consequently, this research provides contextual details. Such details provide some explanation as to why training courses that aim to address inefficiencies not relevant to lean should not be considered within this category. Lean relevant training programmes are well-executed programmes specifically designed to support organisations to have multi-skilled employees deploy lean programmes (Sitzmann and Weinhardt, 2018).
This understanding differs from the previous scholarly works (e.g., Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017) in that they have not made this distinction between lean relevant training courses and training courses to address inefficiencies irrelevant to lean practices. These differences can be explained in part by, for instance, that the concept of ‘training’ is understood to mean any kind of training courses in the journey of lean by previous scholarly works (e.g., Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). It can therefore be assumed that such grounded and insightful understanding of training and development in this study is significant as it enables scholars to ask specific questions to further explore this HRM practice in the future.

8. Career development

Previous scholarly works (e.g., de Koeijer, Paauwe and Huijsman, 2014) also have not touched on the career of individuals who are enrolled in specialised lean related training courses. The findings suggest that these individuals can work an alternative career path, a career path in lean, in their organisation or elsewhere—once they leave their organisation. Such an alternative career path, while provides them with new opportunities, allow service organisations to utilise it to engage them in lean and support its practices.

However, this study was unable to demonstrate that job security is a relevant HRM practice to support lean service. This differs from some published studies (e.g., Bonavia and Marin-Garcia, 2011; de Koeijer, Paauwe and Huijsman, 2014). They suggest that job security is a lean relevant HRM practice and encourages employees to buy-in to lean.

There are however some possible explanations. A closer look at Bonavia and Marin-Garcia (2011) reveals a statistically significant relationship between job security and lean (by employing quantitative data from Spanish ceramics industries). Therefore, this inconsistency may be due to that in such a context job security is expected of an employer (Lazear, 1990). It could also be explained by the ‘manufacturing versus service’ argument (see 2.2.3.2 Service vs manufacturing: the differences). In manufacturing, automation could happen faster than in services. So, respondents in Bonavia and Marin-Garcia (2011) valued job security as their perception of lean could have been that it brings automation to manufacturing processes in their organisation—i.e. they are gradually made redundant.
de Koeijer, Paauwe and Huijsman (2014) develops a conceptual framework. The discrepancy could be attributed to the conceptual nature of their paper. Meaning that while they have included job security as a relevant HRM practice to lean in their conceptual model, their work needed to be empirically verified. Therefore, contrary to their conceptual framework, the findings of this thesis do not find job security as a lean relevant HRM practice in service organisations to support lean service.

9. Performance management
Service organisations use performance management to assign employees with lean specific KPIs to fulfil. This corroborates the statistically significant links earlier scholars (e.g., Snell and Dean, 1992) have drawn between performance management and lean. In this context, performance management is very much about how the performance of an employee is further improved through feedback rather than using performance management as a vehicle to punish employees for underperformance (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017). This understanding is also in line with previous scholarly works (e.g., Moyano-Fuentes and Sacrista´n-Díaz, 2012) that the abundance of quality feedback positively influences workers’ performance in lean programmes. Therefore, it is safe to assume that service organisations heavily depend on quality feedback to direct their employees to support lean practices (Forza, 1996)

However, more research in the future on this practice needs to be undertaken before the association between performance management and lean is more clearly understood. We need to understand if assigning lean specific KPIs to employees encourage them to buy-in to lean practices.

10. Reward and recognition
Service organisations utilise reward and recognition to manage and orient their employees to buy-in to lean ways of conducting their work. This accords with the works of several previous scholars (e.g., MacDuffie, 1995). The research of Netland, Schloetzer and Ferdows (2015) suggest that there is a positive link between nonfinancial rewards and extensive application of lean practices in an organisation. However, their work, contrary to this study, do not provide evidence for the same positive link between financial rewards and lean deployment. The stand of this thesis is also contrary to Martín and García (2010), Bonavia and Marin-García (2011) and Marin-Garcia and Bonavia (2015). These scholars find reward and recognition to
be irrelevant to lean practices. They did not find any statistically significant relationship between reward and recognition and lean.

This inconsistency may be because of differences in how reward and recognition is defined in this thesis and by these scholars (for definitions, see: Appendix VIII: Key definitions). This discrepancy could also be attributed to two different contexts. This thesis collected the required primary data in service organisations in the UK, but these scholars collected their data in other contexts such as Spanish ceramics industries in Spain. It also seems possible that these results are because of using different types of data: this thesis collected qualitative data through interviews while these scholars mainly collected quantitative data using survey. For this research inquiry, due to the nature of interviews as a data collection technique, the researcher had the opportunity to ask prompt questions to obtain further details on the utilisation of reward and recognition. Consequently, further details were available to the researcher while such details were not available, for instance, to Martín and García (2010), Bonavia and Marin-Garcia (2011) and Marin-Garcia and Bonavia (2015). However, a note of caution is due here since this explanation does not demonstrate why Snell and Dean (1992) and MacDuffie (1995), using quantitative data, were able to suggest statistically significant relationship between reward and recognition and lean. Accordingly, although this finding differs from some published studies, they are consistent with others.

11. Employee voice
Service organisations enabled employees to air their voice and concerns in lean-related meetings on lean related projects. This is consistent with the work of other scholars (e.g., Taylor, Taylor and McSweeney, 2013) that employees not only be instructed but also inspired to ascertain their continuous improvement suggestions to improve their workplace. Such continuous improvement ideas usually have three elements: (i) a change that employees push to initiate, (ii) resources that organisations are required to allocate for the change to happen, and (iii) involving the many parties impacted by the change (Burris, Rockmann and Kimmons, 2017).

In service organisations, generally, employees hold knowledge on how service delivery processes work. This knowledge is important in lean service as it enables employees to suggest improvement ideas about their service delivery processes. This explains why several scholars (e.g., Forza, 1996; Taylor, Taylor and McSweeney, 2013) have suggested that
organisations seriously consider employee voice to support lean practices. This also explains, using contextual data, why other scholars (e.g., Burris, Rockmann and Kimmons, 2017) have suggested that employee voice is positively associated with lean practices.

12. Groups and teamwork
Service organisations encouraged their employees to work in groups and teams on lean projects. Teamworking in this context simply means ‘self-directed work teams’ (Shah and Ward, 2003). This extends previous understanding that encouraging employees with an enthusiasm to lean practices to work together significantly benefits lean projects (O’Reilly, Healy and O’Dubhghaill, 2018). Some scholars (e.g., Anand et al., 2009) suggest that for lean to work teams of workers are required to work together to improve operational aspects of their organisation. A possible explanation for this might be that team working matures individual improvement ideas and inspires employees to exchange knowledge (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017). So, an implication of this finding is the possibility that a supportive team working environment reduces the tension of lean service on employees (Neirotti, 2018).

13. Employee communication and collaboration
Service organisations use various communication channels to enable bidirectional communication among employees and their managers. This finding is consistent with that of previous scholars (e.g., Lorden et al., 2014; Marin-Garcia and Bonavia, 2015; Ocasio, Laamanen and Vaara, 2018) that a timely bi-directional communication engages employees and their managers in lean practices. Scholars (e.g., Atkinson, 2010; Marín-García et al., 2010; Leggat et al., 2018) suggest that to support lean practices, organisations need an enhanced communication system. However, the findings do not specify the degree of effectiveness of the channels in supporting lean practices. Research questions that could be asked in the future might include which one of the proposed communication channels in this study is more effective for supporting lean service.

14. Labour relations
Service organisations utilise labour relations to leverage unionised workers to support lean practices. They capitalise on labour relations to engage unionised employees in lean service. This does not appear to be the case for Godard (1998). He suggests that a minority of the respondents in his research reported that unionised employees were avoided than involved in
lean by their organisation. What is surprising is that such understanding of the minority respondents in Godard (1998) is not found in this thesis.

This inconsistency with Godard (1998) may reflect a two decade of time gap between when Godard (1998) collected data for his research and the current study. This period has changed how organisations view unionized workers in a lean context. While unionized workers might have been thought of as inhibitors of lean back then; now, they are involved in lean service by service organisations.

This thesis however supports the work of Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez (2014) in that service organisations that set up a joint management-trade union team could benefit better from lean by bringing their unionised workers on board to support lean. This arrangement is especially crucial at the initial stages of lean deployment (i.e. the Beginner stage of lean maturity). Through this thesis differs from their work in that not all organisations should be assumed to have the same level of unionised workers. This arrangement, while is vital for the success of lean service in organisations with high level of unionised workers, does not seem to be effective in non-unionised organisations. So, similar to other scholars (e.g., Kochan and Lansbury, 1997), this work acknowledges that there is a significant variation among organisations in terms of organisation-trade union arrangements to support lean practices. When an organisation is highly unionised, this thesis agrees with previous scholars (e.g., Panizzolo, 1998) that managing the external relationship with trade unions is a critical factor for the success of lean programmes.

15. Employee motivation

Service organisations motivate their employees to conduct lean projects and celebrate the success of their projects with co-workers. Although Gao and Low (2015) suggest that employee motivation is a lean relevant HRM practice, they label it as ‘motivation and organisational support’ in a construction industry without providing much contextual details. Other scholars’ intake of this practice (e.g., Bonavia and Marin-Garcia, 2011; Sangwa and Sangwan, 2017) to support lean could be summarised as using salary, rewards and other remuneration schemes to encourage lean desired behaviour. Such behaviour includes ‘CI behaviour’ that denotes an employee is motivated to make efforts to suggest improvement ideas to improve workplace (Jørgensen, Laugen and Boer, 2007). Other scholars (e.g., de Treville and Antonakis, 2006) suggest that a job design based on a configuration of lean
practices should also intrinsically motivate employees. This research corroborates the findings of these studies and adds to them by describing the various strategies that service organisations employ to motivate employees to conduct lean projects.

16. Employee involvement
Service organisations involve employees in lean service because lean requires active employee involvement (Biazzo and Panizzolo, 2000; Sawhney and Chason, 2005). Employees are able to impede or foster lean initiatives (Forrester, 1995). This is consistent with other scholars (e.g., Marín-García et al., 2010) who suggest that employee involvement is a vital component of lean practices. For that reason, this insight suggests that in the absence of employee involvement, lean service is a limited application of lean tools and techniques in service organisations. It could therefore be assumed that employee involvement is positively linked to a successful lean deployment (Longoni and Cagliano, 2015; Holland, Cooper and Sheehan, 2017; Neirotti, 2018).

However, this finding does not support the work of Vidal (2007). What is curious about Vidal (2007) is that he argues that because employees are dissatisfactory with lean, they are not involved in it. The reason for variation is unclear but it may have something to do with the different research questions both studies have attempted to answer.

17. Employee empowerment
Service organisations allow their employees greater discretion and provide them with more resources to conduct lean projects. Other scholars (e.g., V. Wickramasinghe and Wickramasinghe, 2017a) also prescribe the importance of employee empowerment to support lean practices. Empowerment increases the feeling of ownership among employees and therefore encourages them to willingly work to support lean (Forza, 1996). Accordingly, organisations can devolve responsibility of workplace improvement to employees (Taylor, Taylor and McSweeney, 2013). And so, employees need to perform a variety of tasks related to lean deployment (Forza, 1996). They are also are able to inspect the quality of their work (Gutierrez-Gutierrez, Barrales-Molina and Kaynak, 2017).

However, this finding cannot be extrapolated to mean that employees are allowed ultimate empowerment to conduct lean projects. As the findings demonstrated, employees are allowed extra resources and empowered to use discretionary behaviour to support lean service when
their proposed lean projects are approved by their organisation. Other scholars (e.g., Vidal, 2007) might also argue that empowerment and extra resources to conduct lean projects do not ensure employee satisfaction with lean practices.

18. Employee health and safety
Service organisations take actions to maintain employee health, safety and wellbeing in the process of lean service. This is in line with the existing literature that suggests increase of injury rates, ergonomic issues and musculoskeletal disorder not only negatively impact lean but also signals lack of managerial competence and support for employees (Womack, Armstrong and Liker, 2009; Angelis et al., 2011). If employees are unable to attend work due to health and safety issues, their line managers find themselves in a situation where they do not have the required employee resourcing to conduct lean projects. Service managers are therefore responsible to ensure the health and safety of their employees (e.g., Sangwa and Sangwan, 2017; Schwarz et al., 2017; Huo, Boxall and Cheung, 2018). If employee health and safety is not looked after, lean could have unfavourable effects on employees and their working lives, service provision and, gradually, lean service (Conti et al., 2006). This is also consistent with recent publications (e.g., Loon, Otaye-Ebede and Stewart, 2018) in that organisations can enhance employee wellbeing utilising HRM practices. Several other scholars (e.g., Schwarz et al., 2017) also suggest that lean tools (e.g., Figure 65) enable an organisation to increase level of employee awareness of health and safety issues at work.

To this point, the researcher has placed the findings in terms of what HRM practices contribute to HR-enabled lean service in the body of literature. Consequently, the findings indicate that, to support lean service, it is vital to go beyond the technical implementation of lean tools and techniques and adopt lean relevant HRM practices to nurture employees through lean maturity stages. It can therefore be assumed that the findings further elaborate, refine and extend previous understanding on the relevance of HRM practices to lean service.

5.4 A lean-specific HRM bundle
5.4.1 Bundling HRM practices
This thesis proposes a lean-specific HRM bundle to support lean service (see Figure 79). The proposed bundle reflects ‘why’ service organisations utilise HRM practices to support lean
practices rather than ‘what’ practices they utilise. This section places the proposed bundle in the body of the literature.

Bundling HRM practices “is the development and implementation of several HR practices together so that they are interrelated and therefore complement and reinforce each other.” (Armstrong and Taylor, 2014, p. 25) For that reason, the proposed lean-specific HRM bundle represents the 18 HRM activities that service organisations conduct with the potential to support lean service. This understanding is also in line with earlier studies that note the importance of the human element in embedding lean practices (e.g., de Koeijer, Paauwe and Huijsman, 2014; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014; Bello-Pintado, 2015). These studies suggest that the human element of lean is to be managed using a lean-specific HRM bundle.

To some degree, they also guide our understanding by prescribing ‘what’ HRM practices organisations might utilise to support lean practices. However, the implied lean-specific HRM bundle that they prescribe to support lean combines ‘what’ lean relevant HRM practices organisations utilise rather than ‘why’ (e.g., MacDuffie, 1995; de Koeijer, Paauwe and Huijsman, 2014; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014). And so, the prevailing problem with this approach of bundling HRM practices is overemphasizing that all organisations utilise the same set of functional HRM practices to support lean practices. Accordingly, this approach fails to appreciate the existing utilisation of HRM practices in organisations before they employ lean practices.

On the other hand, the most interesting characteristic of the proposed bundle in this thesis (see Figure 79) is that it is not only comprehensive to accommodate the lean relevant HRM practices of earlier scholarly works but also advances them by categorising these practices. Further, in contrast to earlier studies, the proposed bundle also explains ‘why’ HRM practices are utilised to support lean service. This way, using the proposed bundle, service organisations are enabled to compare their existing utilisation of HRM practices with the proposed HRM bundle. In doing that, they are not only avoiding unnecessary steps in lean service but also reducing waste—a vital lean principle (Womack and Jones, 2003).
Using this line of thinking, it can thus be suggested that the HRM practices that service organisations utilise to support lean can be categorised into seven areas of activities of people management (see Figure 78):

Therefore, the proposed bundle is significant in at least four major respects. First, it enhances the list of reported lean relevant HRM practices by earlier scholars (Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014). Second, it reflects contextual and empirical data and, thus, increases our understanding of previous studies on lean relevant HRM practices (de Koeijer, Paauwe and Huijsman, 2014). Third, it categorises the enabling HRM practices that service organisations conduct to support lean service to seven areas of activities of people management and thus brings simplicity to the bundle and adds to its usefulness (Weick, 1989). Fourth, these categories, then, explain ‘why’ HRM practices are utilised than ‘what’ practices are utilised by service organisations. Therefore, this approach is significant theoretically and practically as it clarifies the role of HRM practices in managing and orienting the human element of lean to support lean service (Sunder, Ganesh and Marathe, 2018).

Comparison of the proposed bundle with those of other studies suggest that a lean-specific HRM bundle is significant to manage and orient the human element of lean service (e.g., Power and Sohal, 2000b; Bevilacqua, Ciarapica and De Sanctis, 2016; Rees and Gauld, 2017). Bundling HRM practices to meet a specific organisational need is therefore a ‘good idea’ (for further details, see 5.4.4 Advantages). For that reason, the rationale for bundling HRM practices to support lean practices, in general and in this study, is for greater impact (MacDuffie, 1995; Shah and Ward, 2003; Monks and Loughnane, 2006; Bonavia and Marin-Garcia, 2011).

The proposed bundle enables service organisations to engage their employees in lean service and continuous improvement activities (Rees and Gauld, 2017). It provides them with an infrastructure to implement their lean programmes (Bevilacqua, Ciarapica and De Sanctis, 2016). It also explains the synergistically contribution of a combination of lean relevant HRM practices to support lean practices (Bevilacqua, Ciarapica and De Sanctis, 2016). In view of that, the configuration of the HRM practices in the proposed bundle and the interaction among them suggestively support lean service (This also accords with earlier observations of
Hereafter, the proposed bundle denotes that a combination of HRM practices is more effective than the practices individually in supporting lean service. This line of thinking is also consistent with that of other scholars (e.g., Power and Sohal, 2000b; Shah and Ward, 2003; de Koeijer, Paauwe and Huijsman, 2014; Mostafa et al., 2015). They suggest that a combination of HRM practices employed to support lean practices outweights the importance of an individual practice.

A possible explanation for this line of thinking is that a combination of HRM practices enables organisations to better engage employees in lean practices (Rees and Gauld, 2017). Another possible explanation is that since human resources provide the infrastructure for lean practices, organisations must utilise a lean-specific HRM bundle to maintain the infrastructure throughout lean maturity stages (Ahmad, Schroeder and Sinha, 2003; Bevilacqua, Ciarpica and De Sanctis, 2016).

In line with earlier scholars, the proposed bundle also suggests that the synergy of HRM practices in a lean-specific HRM bundle contributes to the fitness of an organisation to support lean practices (e.g., Bortolotti, Boscari and Danese, 2015).

It could also be argued that the proposed bundle supports lean practices because it benefits employees like how it benefits their organisation. This understanding accords with previous scholarly works that suggest an HRM bundle enables employees to (i) appreciate their full potential (Mostafa et al., 2015), (ii) get involved in lean practices (Vidal, 2007), (iii) get intrinsic and extrinsic motivation (Hiltrop, 1992), (iv) increase their knowledge and skills (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017) and (v) obtain specialised knowledge (Sparrow and Otaye-Ebede, 2014). However, while this thesis acknowledges all these benefits for employees that may result from adopting the proposed bundle, the main focus of the bundle is to enable service originations to manage and orient their employees to support lean service.

Subsequently, one implication of the proposed bundle is that it should not be understood as what Atkinson (2010) referred to 'being nice to people' or 'train employees for the sake of
training’ by adopting it. The findings suggest that this bundle and the HRM practices that constitute it are analytically associated with lean service.

5.4.2 A specific HRM bundle to support lean service

When bundling HRM practices, an important question is: How do you bundle certain HRM practices? There is a significant variation in the literature with regard of how HRM practices are bundled. Examples of the existing bundling include: ability–motivation–opportunity (Bello-Pintado, 2015), calculative-collaborative-intermediary (Gooderham, Parry and Ringdal, 2008), development-maintenance-utilisation-accommodative (Fens, 2010), core-ancillary (Monks and Loughnane, 2006), optional-obligatory (Bello-Pintado, 2015), deadly-non deadly combinations (Becker et al., 1997) and empowerment-motivation-skill enhancing (Subramony, 2009). Therefore, the existing literature is unable to suggest a one-way approach to bundling HRM practices along with a clear rationale (Bello-Pintado, 2015).

Further, existing bundles are generally based on the notion that bundling reflects the configuration of HRM practices and the interaction among them (Shah and Ward, 2003; Bello-Pintado, 2015). The overlapping and interaction among HRM practices in a bundle consequently explain enhanced organisational outcomes (Gooderham, Parry and Ringdal, 2008; Bello-Pintado, 2015). This line of thinking therefore suggests that bundling HRM practices usually serves a specific organisational purpose (MacDuffie, 1995). It also suggests that not all HRM practices are equally important in a bundle for a specific organisational need (Monks and Loughnane, 2006). HRM practices that form a bundle are therefore need to be a ‘working combination’ (Becker et al., 1997). MacDuffie (1995) also emphasises that organisations bundle HRM practices to be consistent with their culture and business strategy. Therefore, one can argue that bundling HRM practices reflects how a researcher perceives the practices of a bundle overlap to serve a specific need in a set of data about an organisation. There is support for this understanding in the literature. For instance, Monks and Loughnane (2006) uses “it may be useful” when referring to their approach of bundling HRM practices: “it may be useful to view such a system as comprising both core and ancillary HR practices and as dependent on the existence of appropriate HR processes if it is to operate successfully.” (2006, p. 1926)
In chapter two, it was also discussed that a more appropriate bundle asks ‘why’ enabling HRM practices are utilised to support lean practices. This way, service organisations can compare their existing utilisation of enabling HRM practices with a proposed bundle. This approach not only avoids unnecessary steps in employing lean practices but also reduces waste—a vital lean principle (Womack and Jones, 2003). It also increases the ‘usefulness’ of a proposed bundle to service organisations and lean-informed service managers and adds to its plausibility of application (Weick, 1989).

Moreover, Armstrong and Taylor (2014) categorise HRM practices as they overlap into: “resourcing, learning and development, performance and reward management, employee relations and administration.” (Armstrong and Taylor, 2014, p. 10). In view of all that and following Armstrong and Taylor (2014), the researcher proposes a specific HRM bundle to support lean service (see Figure 78). The 18 enabling HRM practices serve seven aspects of people management and thus can be categorised into seven areas of activities of people management to support lean service (see Figure 79). They are all discussed hereafter.

First, ‘Employee resourcing’ refers to the enabling HRM activities that provided the organisations with means to ensure they had the required human resources to support lean service. Other labels are also used in the existing literature to mean ‘employee resourcing’ such as ‘resourcing’, ‘people resourcing’ and ‘ER’ (Pilbeam and Corbridge, 2010). The enabling HRM practices form this area of activity include: (i) recruiting and selecting candidates, (ii) reviewing and creating role profiles (iii) designing and balancing employees’ workload, (iii) managing employees’ absence, (v) retaining and releasing employees and (vi) planning successors for roles to support lean programmes. Together, they ensured that the service organisations had the right people in the right place to support lean service.

Second, ‘Training and development’ refers to the enabling HRM activities that ensured employees of the case study organisations acquired and developed lean knowledge, skills and know-how to conduct lean projects and contribute to lean service. Such activities improved employees’ understanding of lean and, thus, advanced their careers to their benefits and their organisations. Therefore, the enabling HRM practices of ‘Training and development’ and ‘Career development’, together, ensured that employees had the appropriate lean skills and know-how to support lean service and such skills and know-how benefited them and their organisation.
Third, ‘Performance management’ activities ensured that employees achieved lean-specific key performance indicators and met lean targets in a timely, efficient and effective manner. It assisted the organisations to identify lean-related KPIs and measure employees’ progression towards achieving them. Therefore, this enabling HRM practice was utilised to align performance of employees and teams with the goals and targets of lean programmes.

Fourth, ‘Rewarding employees’ refers to the interrelated activities that ensured employees were appreciated and recognised for their contribution to lean. The organisations used this enabling HRM practice to encourage the repetition of a desired lean behaviour and outcome. Such activities came in the form of monetary and non-monetary rewards.
Fifth, ‘Employee relations’ ensured that employees’ voice and concerns in connection to lean service were heard by management. These activities also enabled employees to work in teams and groups on lean projects. They also enabled the organisations to maintain a fluid flow of information on lean projects among employees. They also ensured that not only non-unionized employees were involved in lean but also unionized employees were actively and equally involved in it. Therefore, the enabling HRM practices of ‘Employee voice’, ‘Groups
and teamwork’, ‘Employee communication and collaboration’ and ‘Labour relations’, together, enabled the service organisations to manage employee relations to support lean service.

Sixth, activities in the ‘employee behaviour’ category strived to get the best out of employees to support lean service. ‘Best’ in this context referred to employee discretionary behaviour (Armstrong and Taylor, 2014). The organisations utilised enabling HRM practices such as ‘Employee motivation’, ‘Employee involvement’ and ‘Employee empowerment’ to orient employees’ discretionary behaviour to support lean service. Employee discretionary behaviour, in this context, was “the choice made by people to exercise additional effort, care, innovation and productive behaviour in their jobs” (Armstrong and Taylor, 2014, p. 167).

Seventh, ‘Health and safety’ of employees was a crucial element of lean service. This category of activities ensured employees were safe when they conducted lean projects and stayed healthy and active in their workplace. They also ensured that employees’ wellbeing was looked after.

Taken together, it can thus be suggested that a lean specific HRM bundle support lean service in seven areas of activities of people management:

1. The organisations have the required human resources to upkeep lean service.
2. Their employees have the essential lean knowledge, skills and know-how to support lean practices.
3. They align employee performance with lean targets.
4. Employees are properly rewarded and recognised for desired lean behaviour and outcomes.
5. Employees are provided with a fluid flow of information on lean projects and they are enabled to work in teams on these projects.
6. Employees are empowered to use discretionary behaviour to act in favour of lean service.
7. Employees are happy with their share of lean practices. They are treated respectfully and are getting along well with their colleagues.
Figure 79: A specific HRM bundle to support lean service

This provides some explanation as to why a lean-specific HRM bundle is more relevant to lean service when it answers ‘why’ the 18 enabling HRM practices were utilised by the organisations than ‘what’ practices were utilised. In doing so, Figure 79 presents the specific HRM bundle that enabled the case study organisations to support lean service. It can therefore be suggested that these seven areas of activities of people management, together, form the specific bundle of HRM practices that supports lean service.

These categories present the horizontal integration of the 18 enabling HRM practices. The proposed bundle denotes that not all functional HRM practices in service organisations contribute equally to lean service. It is therefore likely that such complementarity among the practices supports lean service. Thus, the practices are horizontally integrated and internally fit. It is hence also suggested that the addition of other HRM practices to the bundle or
removing any of the HRM practices from the proposed bundle make the bundle less effective unless such changes are confirmed by further research.

In summary, this section explained and discussed the proposed lean-specific HRM bundle (see Figure 79). Reflecting on the findings, the researcher attempted to explain why the organisations utilised HRM practices to support lean service. However, there are also some criticisms in the existing literature for bundling HRM practices. The next chapter is considering the four criticisms of bundling HRM practices. It is followed by the advantages of bundling HRM practices. Before the end of this chapter, in the next section, a PDCA framework is presented in which the lean-specific HRM bundle in Figure 79 is integrated in the framework.

5.4.3 Criticisms of bundling HRM practices

Although there are several advantages for bundling HRM practices (see 5.4.4 Advantages), it is criticised in four ways. These criticisms are that: (i) We lack evidence to prioritise one bundle over another. (ii) It is easier to implement an individual HRM practice than a bundle of practices. (iii) We lack clarity around interdependencies among HRM practices in a bundle. (iv) The implementation of an HRM bundle depends on the buy-in of top management in an organisation (Armstrong and Taylor, 2017). These criticisms are towards the operationalisation of HRM bundle. Thus, while the researcher accepts them, he finds that some of them are irrelevant to the proposed HRM bundle. And for others, necessary steps are taken to address them. This section addresses these four criticisms.

The first criticism is that we lack empirical evidence to prioritise one HRM bundle over another, meaning that one bundle cannot be empirically shown that it is better than another one (Armstrong and Taylor, 2017). The researcher accepts this criticism; however, he finds it irrelevant to the proposed lean-specific HRM bundle.

The proposed bundle is to manage and orient the human resources of service organisations to support lean programmes. Therefore, since it assists service organisations to address a specific need in a specific context, it cannot be compared with another bundle that helps them to meet a different need, even if the context is the same.
This understanding is also supported by the existing literature. For instance, Sparrow and Otaye-Ebede (2014) and Sparrow, Hird and Cooper (2014) support the notion that bundling HRM practices reflects a specific organisational need in a specific context. Dyer and Reeves (1995) also explain that there are several ways to bundle HRM practices to meet different organisational needs. Accordingly, the proposed HRM bundle cannot be compared with another when every bundle addresses a specific organisational need in a specific context.

The second criticism is that it is easier for an organisation to utilise a single HRM practice than a bundle of practices (Armstrong and Taylor, 2017). While the researcher acknowledges this criticism, he argues that utilising a single HRM practice, in isolation, is less effective than when it is in a bundle to support lean service. So, it might sound easier for a service organisation to utilise, for instance, ‘employee resourcing’, in isolation as an individual HRM practice to support lean practices. However, ‘employee resourcing’ is less effective in supporting lean practices when it is separated from the proposed bundle.

A service organisation could obtain the required human resources to support lean practices by utilising ‘employee resourcing’. However, in the absence of ‘Training and development’, for instance, employees do not obtain the required lean skills, knowledge and know-how to support lean practices. As a result, the service organisation is unable to support a lean programme even when it has the required human resources.

Similarly, if a service organisation has the required human resources and their employees are trained on lean knowledge, skills and know-how. Still, it is unable to support its lean programme in the absence of the other HRM practices—for instance, employee communication and collaboration. In that case, one group in the service organisation might run duplicate lean projects because they lack communication with other teams in the organisation.

Therefore, while it might sound easier for an organisation to deal with an individual HRM practice, supporting lean service necessitates the adoption of the entire components of the proposed HRM bundle. This line of thinking is also supported by the existing literature. For instance, Osterman (1994), MacDuffie (1995), Shah and Ward (2003), Bonavia and Marin-Garcia (2011) and Bello-Pintado (2015) argue that an individual HRM practice is less effective than when it is in a bundle to support lean practices.
The third criticism is that organisations are unable to manage the interdependencies among the HRM practices of a bundle (Armstrong and Taylor, 2017). While the researcher appreciates this criticism, he argues that the logic for bundling HRM practices is not for managing the interdependencies among the practices. It is rather to bring together HRM practices that can horizontally be integrated to address a specific need of an organisation in a specific context (Armstrong and Taylor, 2017).

Therefore, the practices that form the proposed HRM bundle are complementary, interrelated and horizontally integrated to assist service organisations with managing and orienting their human resources to support lean practices. These HRM practices are to be utilised collectively by them in order to support their lean programme (e.g., Dal Pont, Furlan and Vinelli, 2008).

For that reason, the purpose of the proposed HRM bundle is the combined support of the practices to lean practices rather than the interdependencies among them. This line of thinking is also supported by the existing literature (e.g., Dean and Snell, 1996; Shah and Ward, 2003; Dal Pont, Furlan and Vinelli, 2008; Bonavia and Marin-Garcia, 2011; Bello-Pintado, 2015).

The final criticism is that the implementation of a bundle depends on the buy-in of the top management of an organisation (Armstrong and Taylor, 2017). While this criticism warns of a challenge with the operationalisation of the proposed HRM bundle, it also provides opportunities to increase the impact of the bundle when it is operationalised. Also, this critique is not only applicable to the proposed bundle in this study. It is also applicable to other bundles or, even, managerial approach in organisations such as high performance work organisations (HPWO) (Kim and Bae, 2005).

Furthermore, the proposed bundle reflects the context of lean application in the service sector. The data that was collected to develop the bundle was through naturalistic data collection techniques. Therefore, the relevance of the bundle to lean service is very high. And so, the operationalisation of the bundle does not require any strategic changes to HRM practices. The bundle does not disrupt the day to day work of service organisations. More, previous scholarly works confirm that organisations that utilise HRM practices in the form of
a bundle maintain a higher level of operational performance (e.g., Shah and Ward, 2003; Monks and Loughnane, 2006; Dal Pont, Furlan and Vinelli, 2008; Delery and Gupta, 2016). This encourages top management to want to adopt the bundle.

These were the four criticisms of bundling HRM practices. While this section addressed them in the context of this thesis, the following section discusses the several advantages of bundling HRM practices.

**5.4.4 Advantages of bundling HRM practices**

Bundling HRM practices and utilising it to support lean practices benefit (i) service organisations and (ii) their employees. Therefore, when lean service is coupled with the proposed HRM bundle, organisations and their employees, mutually, benefit from lean practices (Bamber et al., 2014; Sparrow, Hird and Cooper, 2014).

Service organisations benefit from the proposed bundle to support their lean programmes (Shah and Ward, 2003; Furlan, Vinelli and Dal Pont, 2011). They are not only supporting lean service but also sustaining it as ‘business as usual’ (Sparrow, Hird and Cooper, 2014; Bortolotti, Boscari and Danese, 2015). While the proposed bundle enables them to create lean-desired behaviour and outcomes from their employees (Power and Sohal, 2000b), they also decrease negative implications that might arise from employing lean practices such as employee turnover (Laureani and Antony, 2010). Further, they could also improve organisational performance (Gollan, Kalfa and Xu, 2015) and reduce inventory and boost productivity (Bonavia and Marin-Garcia, 2011).

By the same token, utilising the proposed bundle to support lean practices also benefits their employees by improving their wellbeing (Conti et al., 2006; de Koeijer, Paauwe and Huijsman, 2014). This is because the proposed bundle allows service organisations to address various employee-related issues of lean (Sparrow, Hird and Cooper, 2014). It encourages them to meet their employees’ needs in a lean context (Simmons, Shadur and Preston, 1995). Therefore, utilising the proposed bundle intrinsically motivates employees to conduct lean projects (de Treville and Antonakis, 2006), improves their morale (Liker and Hoseus, 2010) and, thus, increases their satisfaction (Laureani and Antony, 2010).
As a result, by utilising the proposed HRM bundle to support lean practices, service organisations take significant steps towards achieving competitive advantage (Lewis, 2000; Marín-García et al., 2010; Vashisht, Chakraborty and Antony, 2017). Such approach to lean service is particularly vital in the service sector. This is because the human element is a significant element of lean service (Abdi, Shavarini and Seyed Hoseini, 2006).

5.4.5 PDCA framework with proposed HRM bundle integrated

One significant contribution of the proposed lean-specific HRM bundle is that it can be mapped against the continuous improvement model of PDCA (plan-do-check-act)—Deming Cycle (Deming, 2000), a popular TQM tool (Tague, 2005)—showing lean service planning, provision and monitoring (Figure 80). The PDCA cycle is a four-step approach to implement change (Deming, 2000). The steps are usually defined with informative words: (i) ‘Plan’ for success, (ii) ‘Do’ for performance, (iii) ‘Check’ for monitoring and (iv) ‘Act’ for improvement (Basu, 2004; Moen and Norman, 2006).

Employing lean tools and techniques such as PDCA creates a lean environment in an organisation (Kimsey, 2010). The PDCA cycle needs to be repeated for continuous improvement (Tague, 2005). This understanding reflects in the PDCA framework developed in this study. The understanding behind the framework is consistent with the literature in that continuous improvement is only achieved through repeated PDCA cycles (Tague, 2005). However, this study goes beyond the prescribed cycle and equips it with a lean-specific HRM bundle to support lean service. Therefore, it significantly adds to the ‘usefulness’ of the cycle in supporting lean service deployment in an organisation by giving it a humane orientation (Bortolotti, Boscari and Danese, 2015). The framework also maintains the eight quality principles of customer focus, leadership, employee involvement, process approach, systematic approach to service management, continuous improvement, informed decision making and mutual beneficial relationship between management and employees (Kimsey, 2010).

Figure 80 illustrates that lean-informed service managers can use the first step ‘Plan’ to analyse needs assessment and plan lean service. Service managers generally know issues of service delivery from experience; however, this is not advantageous to lean way of service delivery (Kimsey, 2010). The root cause of a problem ought to be investigated, analysed,
understood and solved (Kimsey, 2010). The ‘Plan’ phase encourages service managers to go to where the work is done and continually asking questions to find the reality about a problem and its cause (Kimsey, 2010). This step also requires lean-informed service managers to plan the employee management of lean service. Figure 80 suggests that they start with ‘employee resourcing’ followed by ‘training and development’ as part of planning employee management when planning lean service.

The second step is ‘Do’ lean service, meaning that they conduct the actual integration of lean service tools and techniques into service provision processes. The ‘Do’ phase involves swift improvement team working to develop and trial countermeasures that could solve a problem or eliminate waste from service delivery processes (Kimsey, 2010). Figure 80 suggests that lean-informed service managers need to focus on the actual employee management during this step. The areas of activities of people management which are crucial in this step are: ‘Training and development’, ‘Performance management’, ‘Reward and recognition’, and ‘Employee relations’, ‘Employee behaviour’ and ‘Employee health and safety’. The next step in the proposed framework is to choose one of the counter measures and create a plan for action (Kimsey, 2010).

While the ‘Do’ step aligns lean service instructions with the actual lean service provision, the third step ‘check’ is applied to assess any gaps between the instructions and the actual application. The ‘check’ phase enables lean-informed service managers to analyse data and understand outcomes of a countermeasure to verify that the chosen countermeasure is working (Kimsey, 2010). In this step, lean-informed service managers also need to monitor the effectiveness of employee management to support lean service.

When a gap is spotted between the instructions and the actual application, the ‘Act’ phase begins. During the ‘Act’ phase of the cycle, lean-informed service managers (or lean teams) make adjustments to the chosen countermeasure and standardize aspects of the countermeasure that was trialled and found to be beneficial in eliminating waste and/or solve a problem (Kimsey, 2010). Also, if a gap is spotted between the instructions and the actual application or the course of action taken in any of the seven areas of activities of people management has been ineffective to support lean service, the ‘Act’ phase is also utilised to apply corrective actions. These corrective actions feed back into ‘planning employee management’ and ‘employee management’.
The PDCA framework provides lean-informed service managers with a structured iterative approach to lean service deployment (Taylor et al., 2014). The framework is widely employed by health service providers (Taylor et al., 2014). The proposed framework (Figure 80) goes beyond the technical nature of the PDCA and equips it with a lean specific HRM bundle. This attempt is in line with the recent literature that suggests lean implementation be given a humane orientation (Bortolotti, Boscari and Danese, 2015). The framework therefore not only creates a lean environment through implementing plan-do-check-act (Kimsey, 2010) but also gives service organisations a specific organisational culture (Bortolotti, Boscari and Danese, 2015) in which the lean principle of ‘respect for people’ is valued (Ohno, 1988).
The framework also simplifies the process of lean service deployment (Gorenflo and Moran, 2010). It is a systematic, straightforward and flexible approach to tease out waste from service delivery processes by continually re-testing lean changes (Taylor et al., 2014). It also encourages teamworking approach to problem solving (Gorenflo and Moran, 2010). It encourages lean-informed service managers to ask if they have the right people and training and who facilitates teams and improvement (Gorenflo and Moran, 2010).

The implication here is that the framework can be used as a practitioner tool indicating those areas of HRM activities are constantly under management review as an integral part of lean service management. Further, consistent with the literature (e.g., Tague, 2005; Moen and Norman, 2006), this study (see Figure 80) suggests that the PDCA framework, equipped with a lean-specific HRM bundle, can be used to support lean service in several ways, for instance: (i) to provide continuous improvement guidance, (ii) to commence new improvement projects, (iii) to develop a new or improved design of a service process, (iv) to define a ‘lean-way’ of a repetitive service process and (v) to verify and prioritize problems or root causes during service provision.

5.5 Summary of chapter
The proposed HRM practices (see 4.3 Themes from the data) covered seven areas of activities of people management to support lean service: (i) employee resourcing, (ii) training and development, (iii) performance management, (iv) reward and recognition, (v) employee relations, (vi) employee behaviour and (vii) employee health and safety. Together, these seven areas of activities form a lean-specific HRM bundle to support lean service. The proposed HRM bundle then is mapped against the PDCA framework, helping organisations to support lean service planning, provision and monitoring using the seven areas of activities of people management.

The proposed HRM bundle allows service organisations to support their lean programmes and sustain them by enabling their employees to be part of these programmes. The findings increase our existing understanding of utilising HRM practices to support lean service by elaborating, refining and extending the findings of previous scholarly works. It can therefore be assumed that such comprehensive understanding of HR-enabled lean service enables the
forthcoming scholars to ask specific questions on lean relevant HRM practices in service organisations.

However, there are also some limitations that could be addressed in future scholarly works. The next chapter discusses these limitations and suggests how they could be addressed in the future. It also concludes this thesis by discussing the contributions of the thesis to theory and practice.
Chapter 6: Conclusion

This chapter highlights the significance of the findings, draws together the concluding remarks and discusses future directions and implications. In doing so, first, it restates the research questions and the evidence employed to answer them. Then, it discusses the contribution of the thesis to theory and practice. Next, it explains the research limitations and offers suggestions for future research.

Chapter outline

6.1 Introduction ............................................................................................................ 274
6.2 Contribution to knowledge ..................................................................................... 276
   6.2.1 Contribution to theory ...................................................................................... 276
   6.2.2 Contribution to practice .................................................................................... 278
6.3 Research limitations ............................................................................................... 283
6.4 Suggestions for future research ............................................................................. 284
6.5 Summary of chapter ............................................................................................. 286
6.1 Introduction
Lean practices refer to plans and actions that organisations conduct to drive continuous improvement outcomes. These plans and actions help service organisations to improve their service delivery processes. However, as this research has also demonstrated, lean is not to be merely understood as the application of lean tools and techniques. Such understanding overlooks the crucial role people play in integrating lean practices into service operations.

The guiding research question has been ‘How, in practice, do service organisations engage with HRM practices to support lean service?’ This question was divided into four sub-questions. To answer the first sub-question, the findings confirm the significant role that HRM practices play in managing and orienting employees to support lean practices. In the absence of a proper utilisation of HRM practices, lean service is merely a list of tools and techniques with limited application.

The HRM practices that support lean service are recruitment and selection, role profiling, capacity planning, absence management, succession planning, retention and release, training, career development, performance management, reward and recognition, groups and teamwork, employee voice, employee communication and collaboration, labour relations, employee motivation, employee involvement, employee empowerment and employee health and safety. They enable service organisations to manage their human resources to support lean service. The list of enabling 18 HRM practices answers the second sub-question.

Table 15 summarises the answer to the third sub-question. The contextual and in-depth data allowed the researcher to understand how the HRM practices are utilised by service organisations to support lean service.

<table>
<thead>
<tr>
<th>HRM practice</th>
<th>How supports lean service</th>
</tr>
</thead>
<tbody>
<tr>
<td>recruitment and selection</td>
<td>to attract, select, orient and appoint candidates with lean knowledge, skills and experience to fill vacant support, managerial and lean roles</td>
</tr>
<tr>
<td>Role Profiling</td>
<td>To clarify roles, tailor existing roles and create new roles to satisfy role profile needs of lean services</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Capacity Planning</td>
<td>To move and trade surplus human resources across teams and departments</td>
</tr>
<tr>
<td>Absence Management</td>
<td>To understand patterns of habitual missing of employees from work and reduce absenteeism</td>
</tr>
<tr>
<td>Succession Planning</td>
<td>To identify and develop suitable candidates among existing workforce to succeed departing members of ‘lean teams’ and key lean roles</td>
</tr>
<tr>
<td>Retain and Release</td>
<td>To retain employees by moving them across teams and release them to work on lean projects</td>
</tr>
<tr>
<td>Training</td>
<td>To equip employees with lean-related knowledge, skills and expertise</td>
</tr>
<tr>
<td>Career Development</td>
<td>To allow trained employees to work a career path in lean in their organisation or elsewhere</td>
</tr>
<tr>
<td>Performance Management</td>
<td>To assign employees with lean specific KPIs to achieve</td>
</tr>
<tr>
<td>Reward and Recognition</td>
<td>To reward and recognise lean desired behaviour and outcomes</td>
</tr>
<tr>
<td>Groups and Teamwork</td>
<td>To encourage employees to work in groups on lean projects</td>
</tr>
<tr>
<td>Employee Voice</td>
<td>To enable employees to air their voice and concerns on lean related projects in lean-related meetings</td>
</tr>
<tr>
<td>Employee Communication</td>
<td>To allow bidirectional communication among employees and their managers</td>
</tr>
<tr>
<td>Labour Relations</td>
<td>To capitalise on labour relations to engage unionised employees in lean practices</td>
</tr>
<tr>
<td>Employee Motivation</td>
<td>To motivate employees to conduct lean projects and celebrate their success with co-workers</td>
</tr>
<tr>
<td>Employee Involvement</td>
<td>To actively involve employees in lean projects and lean service</td>
</tr>
<tr>
<td>Employee Empowerment</td>
<td>To allow employees a greater discretion to conduct lean projects and provide them with more resources</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>To take actions to maintain employee health, safety and wellbeing when employing lean practices</td>
</tr>
</tbody>
</table>
The HRM practices ensured that: (i) service organisations had the required human resources to support lean practices, (ii) employees had the necessary lean knowledge, skills and know-how to conduct lean projects, (iii) employees achieved lean KPIs and their performance was aligned with lean targets, (iv) employees were properly rewarded and recognised for lean desired behaviour and outcomes, (v) employees were benefiting from a fluid flow of information on lean projects and they were enabled to work in teams on these projects, (vi) employees used discretionary behaviour to act on lean projects and (vii) employees were treated respectfully and their well-being was looked after.

6.2 Contribution to knowledge

6.2.1 Contribution to theory
This thesis contributes to the existing understanding on the relevance of HRM practices to lean service. The main contributions are: (i) identifying 18 enabling HRM practices, (ii) proposing a lean-specific HRM bundle, (iii) developing a novel PDCA framework, (v) using Bundle theory to explain findings and (v) drawing on S-Curve theory. Therefore, it provides new empirical data and contextual evidence from five case study organisations in the UK to elaborate, refine and extend the existing theoretical understanding on HR-enabled lean service. The case study organisations offer insights as to how service organisations utilise HRM practices to support lean practices. Such insights are significant in terms of theory development because they enrich the existing understanding of the human element of lean service.

Whetten (1989) proposes four components for a meaningful theoretical contribution to knowledge. The first component is the ‘what’ question: What are the essential elements that form a comprehensive understanding of a phenomenon in a study? The second component is the ‘how’ question. This question requires a description of how the essential elements are related and operationalised. The third element is the ‘why’ question. ‘Why’ requires an explanation as to why the essential elements explain the phenomenon of a study and why these elements are operationalised. While ‘what’ and ‘how’ describe a phenomenon, ‘why’ explains it. The fourth component is the questions of ‘who, where and when’. These questions set the boundary for the findings of a study. That’s to say: (i) who uses the essential elements, (ii) where are the essential elements used and (iii) when are the essential elements used.
Following this line of thinking, the findings satisfy the four essential elements of a comprehensive understanding of enabling HRM practices to support lean service. First, the findings provide the essential HRM practices to support lean service (see Figure 49). Second, the findings also explain how these HRM practices are used by service organisations to support activities connected to lean service (see Table 15). Third, the findings answer why service organisations use HRM practices to support lean practices (see Figure 79). Fourth, the thesis also defines the boundary of the analytical generalisation of the findings. In doing so, it answers the questions of:

- Who uses the essential elements? Lean-informed managers and team leaders use these enabling HRM practices to support lean service.
- Where are the essential elements used? They are used within team structures in the service sector.
- When are the essential elements used? They are used during all stages of lean projects.

This comprehensive understanding of HR-enabled lean service makes a significant and value-adding contribution to the current understanding of utilising HRM practices to support lean practices in the service sector. Therefore, the salient contribution of this thesis to the existing body of knowledge therefore could be summarized as following:

- Elaborating: The work of previous scholars establishes a crucial link between HRM practices and employing lean principles and increases our understanding of the intermediary role of HRM practices in supporting lean practices (e.g., Shah and Ward, 2003; Dal Pont, Furlan and Vinelli, 2008; V. Wickramasinghe and Wickramasinghe, 2017b). However, they do not provide a contextual and real-world account of the nature of that link, the relevance of the link to the context of lean and 'how' and ‘why’ HRM practices are used to support lean practices. So, while previous research has confirmed that HRM is an enhancing bundle of lean systems, this thesis provides a comprehensive understanding (description and explanation) of a lean-specific HRM bundle. Consequently, the findings of this thesis elaborate understanding of the HRM bundle of lean systems from these previous works.
- Refining: The work of previous scholars reports different lists of lean relevant HRM practices (e.g., de Koeijer, Paauwe and Huijsman, 2014; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014; Bortolotti, Boscari and Danese, 2015). While these
works are significant, there are four limitations with their findings. First, they have reported limited number of relevant HRM practices. Second, they have attempted to build statistically significant relationships between certain HRM practices and lean. Third, while some scholars have reported certain HRM practices to be lean relevant, others have not reported such findings. Fourth, they also have not provided a contextual and real-world understanding of proposed lean relevant HRM practices. Thus, while these studies have provided different lists of lean relevant HRM practices, the findings of this thesis refine these works by providing an essential list of lean relevant HRM practices. Further, the contextual and real-world account of utilising these HRM practices is also provided to explain ‘how’ such HRM practices are utilised for that purpose.

- Extending: Previous scholars have studied the relevance of HRM practices to lean mainly in a manufacturing sector (e.g., Snell and Dean, 1992; Osterman, 1994; MacDuffie, 1995; Bonavia and Marin-Garcia, 2011; Marin-Garcia and Bonavia, 2015). Though these works are significant to increase our understanding of HR-enabled lean, manufacturing and service sector differences cannot be overlooked in interpreting their findings (see 2.2.3.2 Service vs manufacturing: the differences). Therefore, their findings have limited interpretation in a service context. Accordingly, the findings of this thesis extend the findings of these scholarly works by exploring HR-enabled lean in the service sector.

To recap, this thesis has attempted to answer the various calls from the existing literature that request further exploration of the HRM-lean relationship. In doing so, it has advanced our understanding by elaborating, refining and extending the existing theoretical understanding of HR-enabled lean service.

6.2.2 Contribution to practice

It is envisaged that the proposed bundle and the PDCA framework (outlined in Figure 79 and Figure 80) could be adopted more widely by service organisations to assist them with the implementation of their lean programmes. Such adoption not only enables them to engage their workforce in lean service but also succeeds and sustains lean initiatives.
Lean practitioners agree that any lean initiative fails and does not sustain without the full engagement of a qualified and competent workforce of an organisation (Dominick, 2016; Holt, 2017). There are three main reasons for this line of thinking:

(i) Lean requires significant change in employees’ behaviour. Without properly engaging employees in lean service, such initiatives do not produce the desired lean behaviour from employees.

(ii) Lean, unlike other improvement methodologies, requires that the people who do the work be involved in improving the work using lean tools and techniques. So, any support that lean consultants offer an organisation with their lean programmes is to enable people who do the actual work. If those people are not involved in lean service, such lean initiatives fail.

(iii) Service organisations do not have the resources to recruit the appropriate number of lean experts to improve service delivery processes. Nor can they let go of all their existing human resources and replace them with such experts. As a result, it is in their best interest to enable their existing workforce to conduct lean projects. For these reasons, the proposed bundle assists them in enabling their workforce to engage with lean practices in their organisation.

Therefore, this study suggests that service organisations pay careful attention to the HRM practices they use to support lean practices. The findings provide practitioners and line managers in service organisations original insights and practical recommendations on how to make the most of HRM practices to support lean service. Towards that end, Table 16 makes seven practical recommendations to support staff members in successfully conducting lean projects. These recommendations enable service organisations to orient their employees to activities connected with reference to lean. The recommendations allow the required changes from day to day operations of organisations without imposing these changes on employees. They enable service organisations to work with their people to improve service delivery processes.
<table>
<thead>
<tr>
<th>Recommendations</th>
<th>How to do it?</th>
<th>Why do it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that lean projects are adequately resourced</td>
<td>A service organisation could consider several activities to obtain the required number of staff members to support lean practices. These activities include recruiting and selecting new additions to workforce, reviewing role profiles, trading surplus human resources among teams, reducing habitual employees’ absentees, planning successors for key roles and releasing staff members to work on lean projects.</td>
<td>This recommendation ensures that a service organisation has the necessary number of staff members to conduct lean projects at various lean maturity stages.</td>
</tr>
<tr>
<td>Ensure that employees are trained for lean skills and know-how</td>
<td>A service organisation could enrol its staff members in several lean-specific training courses. These courses include lean awareness sessions, lean practitioner courses, lean expert courses, lean six sigma and lean modular training courses. Further, trained staff members as a lean practitioner, a lean expert and a lean six sigma trainer could be encouraged to pursue careers in lean as a lean consultant in their organisation.</td>
<td>This recommendation ensures that the existing staff members of a service organisation have the necessary lean knowledge, skills and know-how of lean tools and techniques.</td>
</tr>
<tr>
<td>Ensure that employees’ performance is aligned with lean targets</td>
<td>A service organisation could align the performance of its existing staff members with lean targets. It can assign lean-specific key performance indicators to each staff member to achieve. Such KPIs include how many continuous improvement ideas a staff member is expected to contribute in a year or how much involvement is expected from a staff member in lean projects.</td>
<td>This recommendation ensures that the performance of existing staff members is aligned with lean targets. It also encourages staff members to see lean as part of their job.</td>
</tr>
<tr>
<td>Ensure that lean desired behaviour is rewarded</td>
<td>A service organisation enforces and encourages lean desired behaviour and outcomes of its staff members by rewarding and recognising them. Reward and recognition for that purpose could come in various forms such as being voted the ‘employee of the month’ or receiving a ‘Thank you’ letter from the CEO or obtaining a patent for an improvement idea or an amount of money (for instance £250) or a box of chocolate or a bottle of champagne or a fully paid weekend with partner in a resort.</td>
<td>This recommendation ensures that a service organization enforces lean desired behaviour and outcomes of its staff members by rewarding and recognising them.</td>
</tr>
<tr>
<td>Ensure that relationships are managed to support lean service</td>
<td>A service organisation needs to encourage its staff members to work in groups and teams on lean projects. They use various communication channels to allow bidirectional communication among employees and their managers. They enable its staff members to air their concerns in lean-related meetings on lean related projects. It also capitalises on labour relations to engage unionised staff members in lean practices.</td>
<td>This recommendation ensures that a service organization benefits from employee relations to support lean service.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Ensure that employee discretionary behaviour is in favour of lean</td>
<td>A service organisation needs to motivate its staff members to conduct lean projects and encourage them to share their success stories with their colleagues across the organisation. It needs to involve staff members in relevant lean-related decision making, especially when they are directly impacted by such decisions. It also allows its staff members a greater discretion and provide them with more resources to conduct lean projects in their area of work.</td>
<td>This recommendation ensures that staff members of a service organisation are motivated to conduct lean projects, involved in relevant lean decision making and empowered to use their discretionary behaviour to support lean.</td>
</tr>
</tbody>
</table>
Ensure that employees’ health and safety are looked after, and their well-being is enhanced

A service organisation should consider the safety and health of its staff members in any lean initiative. It needs to take necessary actions to maintain employee health and safety. These actions range from encouraging and allowing its employees to take part in health and safety meetings to balancing employees’ workload and making their job safer and less stressful.

This recommendation ensures that the staff members of a service organisation are happy with their share in lean service. They are treated respectfully. They are getting along well with their colleagues.

These recommendations relate strongly to the findings and they potentially contribute to practice when employed by organisations. A service organisation, employing these recommendations, significantly increases the success and sustainability of its lean programme (Dominick, 2016; Holt, 2017).

### 6.3 Research limitations

As with all research endeavours, this thesis has limitations. These limitations are: (i) the cross-sectional nature of the data, (ii) the number of the case study organisations, (iii) the unitary perspective of the thesis and (iv) participants’ exposure to lean in their organisation. These limitations are explained below. The researcher hopes that, by sharing them, they are held in perspective when interpreting the findings of this thesis.

First, the qualitative data collected for this thesis is cross-sectional. Therefore, the data represents participants’ thoughts, opinion, understanding and perception at the time the interviews were conducted. That’s to say, the data represents a snapshot of time. The researcher was unable to collect longitudinal data due to several research constraints such as time, cost and access to the case study organisations. However, to accommodate for this limitation, the researcher collected data across five case study organisations. These organisations represented the four stages of lean maturity on the S-curve (Netland and Ferdows, 2016). Accordingly, the data were collected from case study organisations that were two years to ten years into their lean programmes.
Second, the researcher interviewed people from several service organisations. However, only five of those organisations fulfilled the requirements of a case study. MyFinance, FineBank and Hinance were selected to understand HR-enabled lean service in the context of financial services. The findings were then compared with the findings from EastManage and HighEnd. This way, the analytical generalisation of the findings was improved, and the overarching themes came from similar and different types of service activities in the service sector. However, the researcher views the number of the employed case studies as a limitation.

Third, this thesis has a unitarist perspective, meaning that management and employees in the case study organisations work for the good and welfare of their organisation (Wilkinson, Redman and Dundon, 2016). They shared lean objectives, interests and purposes. The participants gave the researcher the perception that their organisation is ‘one big family’. The researcher views the unitarist perspective of the thesis as a limitation.

Fourth, the participants, interviewed for this study, were all exposed to lean. They were enrolled in lean awareness training courses or were members of the ‘lean teams’ in their organization. They had a positive understanding of what lean meant in their organisation. They appreciated that lean had brought several efficiencies in the conduct of their work. So, they portrayed lean in their organisation as a success story. While the researcher found this as an opportunity to purposefully select knowledgeable individuals to interview, it is not clear whether the participants would have had the same perception of lean if lean had disadvantaged them.

Sharing these limitations assists future scholars with the design, planning and execution of their research on HR-enabled lean practices. Although this does not mean that by knowing these limitations, future scholars design a limitation-proof research project. It is rather to acknowledge that they need to make choices that they find appropriate for their research projects.

6.4 Suggestions for future research
While the researcher acknowledged the limitations of the study, they open doors for future research opportunities. They are as follows:
• Future research can concentrate on longitudinal data in a single case study organisation. Using longitudinal data to investigate HR-enabled lean service extends the findings of this study. It increases our understanding of the occurrence and timing of utilising HRM practices to support lean service throughout the maturity stages of lean in a single case study organisation. The utilisation of each HRM practice can more clearly be correlated to each stage of lean maturity. Also, longitudinal data potentially alleviates the ‘recall bias’ of interviewees of the nature of utilisation and significance of a certain HRM practice to support lean. It provides the opportunity to observe individual patterns of utilisation of lean relevant HRM practices over long periods of time.

• Future research can increase the number of the case study organisations. The researcher recommends that future researchers explore HRM-enabled lean in the context of organisations that provide services other than financial, waste management and food distribution services.

• Future research can explore HR-enabled lean service from a pluralist perspective—taking account of trade union perspective, for instance. A pluralist perspective, in this context, refers to a managerial perspective which recognises the potential positive contribution of employees and their representatives, e.g. through unions, and manages conflict through e.g. procedural agreements (Ackers and Wilkinson, 2003).

• Future research can investigate whether participants would have a positive perception and experience of lean if lean disadvantages them in the long run. It would also be interesting if future researchers investigate the phenomenon of this study from the perspective of employees who have been disadvantaged by lean service.

• Further research can investigate whether prior exposure of candidates to lean, when they are compared to candidates without prior exposure to lean, impacts their endorsement of lean.

• Further research can investigate the effectiveness of moving and trading surplus human capacity across teams and departments to support lean practices.

• Further research can investigate if assigning lean specific KPIs to employees encourage them to buy-in to lean practices.

• Further research can investigate which one of the proposed communication channels in this study is more effective for supporting lean service.
6.5 Summary of chapter

Employees of service organisations make or break lean. To engage them in lean practices, service organisations require a proper utilisation of a specific HRM bundle. When such a bundle is not utilised, plans and actions that service organisations conduct to drive continuous improvement outcomes yield a limited application of lean tools and techniques. As an attempt to understand this bundle, this thesis explored the relationship of HRM practices and lean in service organisations.

The findings demonstrated that HRM practices play a vital role in supporting lean service. Thematic analysis (see Figure 20) allowed eighteen HRM practices (see Figure 49) to emerge as the relevant practices to lean. These practices proposed a specific HRM bundle to support lean service (see Figure 79).

These findings provide a grounded understanding of how service organisations use HRM practices to direct their employees to support lean service. In doing so, this thesis advances our theoretical understanding by elaborating, refining and extending the existing understanding (see 6.2.1 Contribution to theory). Moreover, the findings also assist service organisations with their lean programmes (see 6.2.2 Contribution to practice). These findings increase their awareness of effective people management practices throughout lean maturity stages. This awareness enables them to avoid lean failure due to overlooking the human element of lean service (Leggat et al., 2018). Therefore, service organisations are well-advised to properly utilise the proposed bundle to support lean service.

Further, the findings also enable lean practitioners and lean consultancies to consider the crucial human element of lean when assisting service organisations with their lean programmes. With the findings of this thesis, they are informed of how service organisations can direct their employees to support lean practices. Hence, such a rich and in-depth understanding of the human element of lean not only satisfies the people-centric nature of lean service but also saves service organisations precious resources they invest on lean.
References


Edhlund, B. (2011) *Nvivo 9 essentials: your guide to the world’s most powerful qualitative data analysis software*. Stallarholmen: Form & Kunskap AB.


List of appendices

Appendix I: Participant information sheet

Towards an understanding of human resource management (HRM) in lean context of the service sector

Adult Participant Information Sheet

Main Investigator:
Araz Ziar
Loughborough University, Epinal Way, Loughborough, LE11 3TU
Email address: a.ziar@lboro.ac.uk

Supervisors:
Professor Zoe Radnor and Professor Andy Charlwood
Loughborough University, Epinal Way, Loughborough, LE11 3TU
Email address: Z.J.Radnor@lboro.ac.uk; a.charlwood@lboro.ac.uk

What is the purpose of the study?
The aim of the study is to explore the relationship of the human resource management (HRM) to lean application in the service sector. While lean is a management philosophy aiming at elimination waste, the human resource management (HRM) comprises people management systems of an organisation. The findings of this study help future studies of lean application in the service sector.

Who is doing this research and why?
Araz Ziar, a doctoral researcher at Loughborough University, is conducting this research under the supervision of Professor Zoe Radnor and Professor Andy Charlwood. This study is part of a student research project at Loughborough University.

Are there any exclusion criteria?
No there are not. You are invited to participate because you are an employee of the organisations (Case studies) of this study and have experience and knowledge of the application of lean in your organisation. Your participation is entirely voluntary.

What will I be asked to do?
As a participant who is willing to contribute to this study, you are invited to share your perception, experience, knowledge, expertise, and recommendations with regard of the relationship of human resource management (HRM) to lean application in your organisation. You will be asked a number of questions during a face to face interview. The questions are designed to address the various aspects of the topic of the study.

Once I take part, can I change my mind?
Yes. After you have read this information and asked any questions you may have we will ask you to complete an Informed Consent Form. However, if at any time, before, during or after the sessions you wish to withdraw from the study please just contact the main investigator. You can withdraw at any time, for any reason and you will not be asked to explain your reasons for withdrawing.
However, once the results of the study are aggregated/published/dissertation has been submitted (expected to be by September 2017), it will not be possible to withdraw your individual data from the research.

**Will I be required to attend any sessions and where will these be?**
Yes, the interviews are individual interviews and will be conducted in suggested or appropriate spaces in your organisation.

**How long will it take?**
The suggested time is as follows:
- Manager: 60 minutes of interview
- Lean Practitioners: 90 minutes of interview
- HRM Team Members: 60 minutes of interview
- Employees: 45 minutes of interview

**What personal information will be required from me?**
The information which is required during the interviews is not considered personal. The researcher just needs to access your point of view within your organisation in response to the questions asked. Some examples of the situations or procedures that you have to perform might also be asked.

**Are there any risks in participating?**
None.

**Will my taking part in this study be kept confidential?**
- None of the participants will be identified by names or any other form identifiers during the interview and researching process.
- All the personal information will be anonymised.
- Only the researchers will have access to data collected.

**I have some more questions; who should I contact?**
You can contact the researcher or the main supervisor at any time.

**What will happen to the results of the study?**
The findings will be part of the main research conducted by the investigators at Loughborough University. It will be part of the researchers’ doctoral thesis and also academic papers.

**What if I am not happy with how the research was conducted?**
If you are not happy with how the research was conducted, please contact Ms Jackie Green, the Secretary for the University’s Ethics Approvals (Human Participants) Sub-Committee:

Ms J Green, Research Office, Hazlerigg Building, Loughborough University, Frinal Way, Loughborough, LE11 3TU. Tel: 01509 222423. Email: J.A.Green@lboro.ac.uk

The University also has a policy relating to Research Misconduct and Whistle Blowing which is available online at http://www.lboro.ac.uk/committees/ethics-approvals-human-participants/additional_information/codes_of_practice/.
Appendix II: Correspondence with potential service organisations

NAME
ADDRESS
DATE

Dear NAME,

My name is Araz Zirar, and I am a PhD researcher at the Centre for Service Management (CSM) in the School of Business and Economics at Loughborough University. My professional career includes a number of HR-related positions including the post of Director of HR from 2011 to 2014 at the University of Kurdistan Hewler (UKH). Currently, I am on study leave from my position as an Assistant Lecturer in the Business Management Department/College of Administration and Economy at the University of Salahaddin, Iraqi Kurdistan.

I am carrying out research to investigate the relationship of human resource management (HRM) to lean in the service sector. In doing so, I am interested to explore human resource management (HRM) bundle in the lean context of the service sector in the United Kingdom.

I would like your permission to come to ORGANISATION and interview a small number of staff.

I am not looking to make any judgements on how well your authority is doing, nor whether you are using the 'right' methods of lean application etc. I understand that every organisation has their own approach, which suits their needs and context. Therefore, this is what is known as exploratory research, where I am simply listening to what people say about their perspective and approach to lean application, and not evaluating them. I have included a brief summary of my research.

Naturally, participation is entirely voluntary, and I am held to a strict ethical code that will ensure anonymity of your organisation and any comments. Individuals will have final say over their data, and I am happy to feedback views to your or a management team if you would find that useful.

I hope that you are able to participate, as my intention is to carry out research that will help to portray the relevance of the human resource management (HRM) to lean application.

I will phone your office within the next three weeks to follow up this letter, and I am happy to answer any questions then, or before if you wish. You can contact me on 07459648530 or a.zirar@iboro.ac.uk. If there is someone else you would prefer me to write or speak to, then please let me know and I will contact them.

Yours sincerely,

Araz Zirar
Appendix III: Informed consent form

[Towards an understanding of human resource management (HRM) in the lean context of the service sector]

INFORMED CONSENT FORM  
(to be completed after Participant Information Sheet has been read)

<table>
<thead>
<tr>
<th>Taking Part</th>
<th>Please initial box</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the Loughborough University Ethics Approvals (Human Participants) Sub-Committee.</td>
<td></td>
</tr>
<tr>
<td>I have read and understood the information sheet and this consent form.</td>
<td></td>
</tr>
<tr>
<td>I have had an opportunity to ask questions about my participation.</td>
<td></td>
</tr>
<tr>
<td>I understand that I am under no obligation to take part in the study, have the right to withdraw from this study at any stage for any reason, and will not be required to explain my reasons for withdrawing.</td>
<td></td>
</tr>
<tr>
<td>I agree to take part in this study. Taking part in the project will include being interviewed and recorded (audio).</td>
<td></td>
</tr>
</tbody>
</table>

Use of Information

I understand that all the personal information I provide will be treated in strict confidence and will be kept anonymous and confidential to the researchers unless (under the statutory obligations of the agencies which the researchers are working with), it is judged that confidentiality will have to be breached for the safety of the participant or others or for audit by regulatory authorities.

I understand that anonymised quotes may be used in publications, reports, web pages, and other research outputs.

I agree for the data I provide to be securely archived at the end of the project.

I agree to assign the copyright I hold in any materials related to this project to [Araz Zirar].

Name of participant [printed]  Signature  Date

Researcher [printed]  Signature  Date
Appendix IV: Flyer used to communicate research

PhD Research: Towards an understanding of human resource management (HRM) bundle in the lean context of the service sector: Evidence from three exploratory case studies

Araz Zirar

What is my research about?
I am carrying out research to investigate the relationship of the human resource management (HRM) to lean in the service sector. In doing so, I am interested to explore human resource management (HRM) bundle in the lean context of the service sector in the United Kingdom.

The absence of the human resource management (HRM) practices in the implementation of lean is believed to fail lean implementation in the manufacturing sector. Human resource management (HRM) practices such as selection, training, compensation, promotion, performance management, motivation, team-working, employee involvement, and communication, if they are bundled selectively to meet different needs in the lean context, are found to be mandatory in the lean context of manufacturing.

However, there is a gap in understanding about how the relationship of human resource management (HRM) bundle to lean application looks like in the service sector.

The research questions
My research aims to answer the following research questions:
RQ1. Given the stated importance of the human resource management (HRM) in the lean context of manufacturing, what is the importance of this relationship in the lean context of the service sector? What can be said about the intricacies of the relationship?
RQ2. What human resource management (HRM) bundle is in the lean context of the service sector? What constitutes a human resource management (HRM) bundle in this context? How should practices in a human resource management (HRM) bundle be combined in the same context?

What do I hope to find?
I want to explore the relationship of the human resource management (HRM) to lean in the context of service sector. In particular, I want to investigate the human resource management (HRM) bundle in the lean context of the service sector in-depth and in context. I am aiming to find out what can be said about the intricacies of this relationship. I am interested to learn what constitutes a bundle of human resource management (HRM) in the lean context of the service sector and how should practices be bundled to serve the needs of lean application in the context.

Who am I?
I am a PhD researcher at the School of Business and Economics at Loughborough University. My professional career include a number of HR-related positions including the post of Director of HR from 2011 to 2014 at the University of Kurdistan Hewler (UKH). Currently, I am on study leave from my position as an Assistant Lecturer in the Business Management Department/College of Administration and Economy at the University of Salahaddin, Iraqi Kurdistan.

You can contact me on 07459848530 or a.zirar@lboro.ac.uk.
Appendix V: Sample transcript

Ian, Distribution General Manager, HighEnd

34:59 **Interviewer:** Nothing has changed?

35:00 **Participant:** Nothing has changed, so, nothing, no, so we have, I give you an example, we do a, a, what we call ‘Bright ideas’. ‘Bright ideas’ is a suggestion scheme. And, we had a colleague—we started that this year. We, we've always had it but we started this year but rather than to say here is a meal voucher or, you know, twenty pound [name of voucher] voucher or a bottle of wine or something other we set. We will spend more money. So, this year, we, the first idea that we've got in February, we paid 350 pound for...

35:35 **Interviewer:** For an idea?

35:39 **Participant:** Yeah, for the idea for the colleague to take his wife away for the weekend, a hotel and meal. So, what I'm trying to say we're putting a little, a little more money into it now, but it's not built in to salaries piece, just a suggestion scheme.

35:54 **Interviewer:** And was, was this scheme the result of lean implementation? Or it was...

35:59 **Participant:** We, we did it before but it was always a bottle of wine, something very nominal, something, you know, ten pounds, 20 pounds tops. As a result of lean, we've now realised that we can save a lot of money. So, therefore you, you, you come up with an idea [Name] and saves 5000, 10000, a 1000 pound, whatever. For me then to give you a bottle of wine, you will be like: okay, thank you for that, you know, in a sarcastic way. You would, you'd probably be thankful of it but at the same time you'd be thinking: I'm coming up with all these ideas and I don't feel like I've been rewarded or recognised well. So, what we've done is to try to take a stage further than that. It's not just about throwing lots of money at it but it's doing it in the right way. So, we've, we've done some reward and recognition, you know, of your colleagues: Pictures on the board, shaking hands, you know, all that because their, their...

36:48 **Interviewer:** Now, this comes with the money, like, you know, [Participant: Yes] this reward, recognition...

36:51 **Participant:** Yeah, yeah, yeah, yeah, but we're again, we are very, we've only started doing that this year, 2016, by spending more money.

36:58 **Interviewer:** And, do you have any other schemes, like you know, similar schemes, like this one, this one called ‘Bright ideas’?

37:03 **Participant:** ‘Bright ideas’, yes. Its ‘Bright ideas’, ‘ask the manager’. I'll show you when we're downstairs. You can see there is a letter box where colleagues will fill the form and put it in, but alternatively they can speak to a CI Council member, then, they will come to the next meeting and put your idea forward. So, it's, you know, it's...

37:22 **Interviewer:** It's a kind of prestige to come to the meeting.
34:59 **Interviewer:** Nothing has changed?

35:00 **Participant:** Nothing has changed, so, nothing, no, so we have, I give you an example, we do a, a, what we call ‘Bright ideas’. ‘Bright ideas’ is a suggestion scheme. And, we had a colleague—we started that this year. We, we've always had it but we started this year but rather than to say here is a meal voucher or, you know, twenty pound [name of voucher] voucher or a bottle of wine or something other we set. We will spend more money. So, this year, we, the first idea that we've got in February, we paid 350 pound for...

35:35 **Interviewer:** For an idea?

35:39 **Participant:** Yeah, for the idea for the colleague to take his wife away for the weekend, a hotel and meal. So, what I'm trying to say we're putting a little, a little more money into it now, but it's not built in to salaries piece, just a suggestion scheme.

35:44 **Interviewer:** And was, was this scheme the result of lean implementation? Or it was...

35:50 **Participant:** We, we did it before but it was always a bottle of wine, something very nominal, something, you know, ten pounds, 20 pounds tops. As a result of lean, we've now realised that we can save a lot of money. So, therefore you, you, you, you come up with an idea [Name] and saves 5000, 10000, a 1000 pound, whatever. For me then to give you a bottle of wine, you will be like: okay, thank you for that, you know, in a sarcastic way. You wouldn't, you'd probably be thankful of it but at the same time you'd be thinking: I'm coming up with all these ideas and I don't feel like I've been rewarded or recognised well. So, what we've done is to try to take a stage further than that. It's not just about throwing lots of money at it but it's doing it in the right way. So, we've, we've done some reward and recognition, you know, of your colleagues: Pictures on the board, shaking hands, you know, all that because their, their...

36:48 **Interviewer:** Now, this comes with the money, like, you know, [Participant: Yes] this reward, recognition...

36:51 **Participant:** Yeah, yeah, yeah, yeah, but we're again, we are very, we've only started doing that this year, 2016, by spending more money.

36:58 **Interviewer:** And, do you have any other schemes, like you know, similar schemes, like this one, this one called ‘Bright ideas’?

37:03 **Participant:** ‘Bright ideas’, yes. Its ‘Bright ideas’, ‘ask the manager’. I'll show you when we're downstairs. You can see there is a letter box where colleagues will fill the form and put it in, but alternatively they can speak to a CI Council member, then, they will come to the next meeting and put your idea forward. So, it's, you know, it's...

37:22 **Interviewer:** It's a kind of prestige to come to the meeting.
months ago and we still, still inexperienced now. So, we're still learning and try to get the best example.

40:59 Interviewer: It is never too late to learn [Laughing]

41:01 Participant: You've always learning but at the same time [Interviewer: And that's good, yeah]. You know, I'm, I'm, if I'm honest, I'm disappointed that we're not further ahead, but you know there is a, what you've got imagine is a lot of people to get on board to get buy-in to, you know, these cultural changes, don't just change overnight.

41:17 Interviewer: Yeah, I agree with you.

41:17 Participant: They've, they've, they need to be a way of life to the point where we don't have CI Council meeting anymore because we do that day to day, people have got that mechanism, they've got that that way of being able to put their ideas forward, the managers and the leaders are listening, so therefore you don't have to have a meeting to discuss it because if it is a way of life, providing there is a process that's in place and everybody is aware of that process, then, you know, it's not it's not so much of a problem.

41:47 Interviewer: I hope you don't mind, I have four questions left, okay? So, my next question is about employee empowerment and involvement [Participant: Yeah] By comparing to the time before implementing lean and now, how do you find employee empowerment and involvement? Are they more empowered and involved now than before? [Yeah] Do you see any change?

42:13 Participant: Again, I mean, we've, on the Council, we've got a few of negative people. Oh, that won't work, we tried that before, you know, you're trying get that piece removed because—English have this saying, you know, if you've always do what you've always done [Interviewer: You get what you've always have got] you will always get what you've always got. And there is always that, that beast that we've done that before, it won't work, but hang on a minute, we did differently before because that wasn't in place, that wasn't in place, now in place. So, we're not actually doing the same thing again, we're doing something slightly different, plus people are more prepared this time plus we've had a, a, program where people have been engaged earlier to get them on board, you know, that stakeholder engagement. So, guess what? If you, you know, you've tried something before, it might have been done very last minute, very rushed, not very structured, where is the second time you learn and you say: Why didn't that work? Because we didn't have the entire infrastructure, we didn't have all the structure together to enable people to want to be engaged, get buy-in and get on board. So, this time, we learn from that, we do it somehow different, I mean, I give you an example: We, as a business, we, one of the lean initiatives is labour management. So, labour management, currently, when colleagues pick, they have a pick rate for chill and a pick right for ambient. Okay. To get that, what I've done is that I've a work study engineer coming to basically study colleagues how they're performing and then they, obviously, do all the calculations, this is the figure made, roll out through the union, the union are involved in the early stages and it's just the case of, you know, colleagues this is the figure that we're now working to, obviously, all generally does go up, but you know, providing that you do
Appendix VI: Sample of coding
Interviewer: I think it is eight years now. I think [284 at the] eight years. So, so, it's my mind.

Interviewer: How do you think, like, you mentioned lean [Interviewee: Yeah] has worked for us [Interviewee: Yeah] in both [Interviewee: Yeah] as a cutting cost and [Interviewee: Yeah] it did. Can you elaborate this point [Interviewee: Yeah, yeah] how, how does it work for your organisation?

Interviewer: Yeah. So, like I said, at the first point it was a cost saving. So, within operations, it was challenged to make a big cost saving. And it did from a right role, right people, right level, and all clarified around. It wasn't about quality, it was actually more about HR and process. So, it was like, for example, the team of twenty people and what processes they are doing. We had some people who was more senior in grade doing jobs that they shouldn't be doing, they should be done by a lower grade. So, it was more about work re-organization and then the right people doing the right job for the right skills and actually challenging them with that. So, that's where we go a cost saving because the regional out with some 3 teams were of five people. They, well, you've got one manager to five people. When another manager with six people, we can really do with just managed. So, it's more the first time round, it was a work reorganization piece, making sure the right work is done by the right person but the volume also in-cooperated as well. So, there was no room for someone say, well, I do process ten apps a day, the person sitting next to him say, well, I do forty. So, it was like that, you know, you should all able to do because we've got models in to capture capacity planners and skills matrices overlaid to say, well, actually on average you should be doing 25-30. So, a person doing ten, you need to either change your idea and get to that 25-30 or you leave the organisation.

Interviewer: Okay. So, it has been eight years and if I may ask, could you tell me about any challenges [Interviewee: Yeah], problems, issues [Interviewee: Yeah] throughout all these years in the process of implementing lean?

Interviewer: Yeah. It was, so, so, the first like, I said, was a cost challenge and it was project we brought to the [Name of Consultancy] to help us because lean was very very new to this company which was [Previous Name of Company] then, I presume someone has explained the history of company, the history to you?

434 Interviewer: No.

Interviewer: So, we were called [Previous Name of Company] and it was a wealth management providing the same products but they were bought by a parent company called [Name of Organisation] and, and, and [Name of Organisation] is a very big [Country of [Global head office and other international branches and local office in the UK] hold it.
Appendix VII: Further details of case study organisations

CS1: MyFinance

MyFinance is a public company which provides financial services. It is an international investment, savings, insurance and banking group. It was established in 1845 as a mutual insurance company. It celebrated 170 years of operation in 2015. In 2016, the company announced a new strategy that separated its four core businesses: (i) emerging markets, (ii) banking, (iii) wealth management and (iv) asset management. This new strategy highlighted the focus of the company on financial wellbeing—financial education and financial inclusion—and responsible investment.

In the UK, MyFinance operates in London, Southampton and the Isle of Man. It provides financial services such as life insurance, savings and investment, asset management, banking and short-term insurance. Instead of head to head competing with its rivals in the market, it focuses its business strategy on areas where it believes it has a strong market position and well-developed competencies.

MyFinance has three key organisational values: (i) pioneering, (ii) dependable and (iii) stronger together. Pioneering is to lead change and drive growth by challenging industry conventions to create new and rewarding opportunities for customers. Dependable is meant to bring expertise, care and judgement to guide customers through complex and challenging times to better financial future. Strong Together symbolizes diversity in the workforce to create a business that provides better services for customers.

The organisation is well-received publicly. It has around 20 million customers and £400 billion in assets under management. It is publicly received as a big company with many functions and offices; a growing company that creates prosperity for customers. It is constantly improving the way it provides services to customers—this is their strength in the market. It is also appreciated for placing a significant attention to diversity in its workforce.

MyFinance has 69000 employees. It considers its workforce as the key ingredient of its success. It usually recruits people with an entrepreneurial attitude. It appreciates candidates who will make use of the company’s many opportunities to grow their careers and stand out from the crowd. The organisation is generous in nurturing its employees equally regardless of
their roles. It endorses the principle that well-managed and motivated people are more productive and effective. Therefore, it supports the personal growth of its workforce wherever they work within MyFinance.

To help its employees, to be the very best they can at their job, it provides them with a variety of development routes for those wishing to progress. These include: (i) study leave with financial support, (ii) leadership and management development programmes and, (iii) business and soft skills development opportunities.

One of the main management concerns in MyFinance is continuous improvement of service delivery processes. In doing so, it attempts to drive strategic growth by continuously improving the organisation through leveraging the strength of its people and collaboration among its many businesses. It has plans to be customer’s most trusted partner in helping them to achieve their lifetime financial goals. Lean principles at MyFinance is to reach five main priorities: (i) deliver on its promise to customers, (ii) drive profitable growth from its core businesses, (iii) accelerate collaboration among its core businesses, (iv) build a culture of excellence and (v) continue to simplify its structure and value delivery service processes.

When the researcher conducted the interviews, MyFinance was almost ten years into its lean programme. Site visits and direct observations allowed the researcher to observe that lean principles have helped the organisation to significantly progress towards fulfilling its priorities. First, it was passionate about serving its customers and about being most accessible through face-to-face and digital channels. It provided most definite solutions to its customers, offer them financial education and advice. Second, it continued to drive profitable growth and sustainable performance in its core businesses. Third, it continued to share skills and experience across the organisation, with emphasis on the collaboration between its core businesses. Fourth, it was clear about the kind of behaviours that deliver continuous improvement in its workforce. It continued to build a culture of excellence through developing its people. Fifth, it continued to simplify and optimise their service delivery processes by exiting non-core businesses.

In terms of lean maturity stage, MyFinance was in the Cutting-Edge stage (Netland and Ferdows, 2016). This means that the organisation was in the highest level of lean service. It was a top performer in providing financial services and was considered as one of the best
among financial service providers in the UK. It was recognised for its lean service. Although by the time of the data collection MyFinance had embarked on lean journey almost ten years earlier, it was still keeping momentum in terms of sustaining its lean practices.

**CS2: FineBank**

FineBank is a public limited company which provides financial and insurance services. It is a retail banking subsidiary of the FineBank Group. It was established in the 1700 and has around 700 branches across the UK to provide banking services. In 2006, it trialled its first contactless debit and credit cards in the UK. The bank also introduced Visa Debit cards with contactless technology for its current accounts. Such changes required the bank to re-consider the efficiency of its operations using lean tools and techniques.

FineBank has operations worldwide. In the UK, it has service operations in all the cities. Even, it has small branches in the towns across the UK. It provides a full range of banking and insurance services to personal, business and commercial customers.

FineBank emphasizes its core purpose in all its operational excellence programmes which is to serve customers well. The key company values are: (i) serving customers, (ii) working together, (iii) doing the right thing and (iv) thinking long term. It aims to provide its customers a consistent and high-quality customer service and experience. These values are also consistent with core objectives of lean service which are to eliminate waste and create value for customers (Bowen and Youngdahl, 1998).

Therefore, the company attempts to be trusted, respected and valued by its customers and stakeholders. It serves its customers by focusing on their needs and delivering the services customers request. It also considers its employees as the core of its businesses and encourages its workforce to work and support one another as a family to realise their potential. It endorses fairness and diversity in its workforce. It also recognises the importance of conducting business in an open, direct and sustainable way with its customers and communities it serves. Therefore, it also values the communities where its businesses operate.

FineBank has been working to regain some level of acceptable publicity after it has been hit with two main setbacks in the past years: (i) bail-out and (ii) sponsoring environmentally unfriendly projects. Since then, it has moved forward by various lean programmes to improve
its service delivery processes across the bank and reduce waste. It has also been working on distancing itself from sponsoring projects that are environmentally unfriendly.

FineBank has more than 90000 employees. It maintains a diverse workforce that has women and disable workers. It aims to have at least 30% women in the leadership positions across the bank. As a result, it has been so far listed among the top 50 companies in the UK for employing women to its workforce. It has also been awarded for being a 'good employer' in general and for employing disable workers. It has extensive training programmes for employees and, for instance, has at least trained 16000 employees in leadership skills by the time of the data collection.

FineBank strives to keep its employees physically and mentally healthy to make the bank a great place to work. Towards that end, by the time the interviews were conducted, around 1000 of its managers were enrolled in its mental health awareness training programme. This training programme was to enable line managers to spot signs of mental health issues at work and give support to employees. Therefore, it prioritises its workforce and believes that if employees are supported with their career in the bank, they provide customers with best customer experience.

One of the key management concerns of FineBank is to close more than 300 branches across the UK in its latest round of cuts. It also attempts to shift customers to online banking. As part of this plan, it started its lean programme around seven years ago. Since then, it is making steady progress towards building a simpler, smaller and fairer bank and remains focused on delivering financial services to personal and business customers.

In terms of lean maturity stage, FineBank was in the Advanced stage (Netland and Ferdows, 2016). This means that the organisation had relatively a high-performance level of employing lean practices. It had already been in the two stages of lean maturity: Beginner and In-Transition. Its operational metrics were best if compared to other banks in the industry which have employed lean services. It had also been able to create a lean culture where performance targets were continually set higher. In 2017, FineBank reported its first annual gain of around a million-pound net profit in a decade.
CS3: Hinance

Hinance is a public company which was split from its parent company in 2015. It is a multinational enterprise found in California, United States. It operates in the UK and provides consulting and financial services to banks across the UK. However, the financial services are mainly image-based cheque clearing services to banks.

The company values timely and accurate cheque clearing services for its client banks. As the largest cheque clearer of sterling payments globally, it strives to ensure the delivery of digital transformation programmes that protect its client bank position in the market. It also values digitisation and, as part of that, helps businesses to digitise their service operations. Hence, digitisation of financial services is one of its main strengths. It has committed itself to helping those banks looking to make these changes with rich digital experience that benefit their customers and employees.

Hinance employs more than 60000 employees. It is generally praised as ‘a good employer’. It provides its employees with various opportunities of career development. It also provides them with benefits such as three weeks of vacation to start with. If an employee still works with the company for more than five years, the vacation time significantly increases. It also maintains a diverse workforce which sometimes labelled by its employees as ‘a global diverse workforce’. It seems that Hinance offers something for every employee. It also offers flexible work schedule to employees including remote office considerations and virtual offices.

One of the key management concerns at Hinance is the reduction of costs. During the site visits to the company, its employees were referring to ‘a never-ending workforce reduction programme’ as part of the lean initiative of the company to reduce costs. The company also needs to improve its record of being very humble with its salary increases.

Hinance initiated its lean programme around four years ago by the time of the data collection. Since then, it has benefited from cross-training and natural attrition to reduce staff level. It has also improved in terms of recognition and rewarding its staff members. It attempts to remunerate its employees for their contributions equally across all its business units.
In terms of lean maturity stage, Hinance was in the In-Transition stage (Netland and Ferdows, 2016). This means that the organisation had started the exploitation phase of lean service. If compared to the Beginner stage, it had integrated lean principles to workplace practices to a greater degree. For that reason, during the data collection period, it was experiencing some radical improvements to its service delivery processes and a sequence of quick gains from lean practices. Although it initiated its lean programme four years ago, still a cultural shift was happening from old culture to a lean way of service delivery. However, a breakthrough in terms of cultural shift was on the horizon if it has kept its momentum. Despite this, Hinance has obtained significant benefits from improving its operational performance by employing lean practices.

**CS4: EastManage**

EastManage is a public limited company which provides waste management services. It was established in the 1900 to modernise household waste collection. In 1971, the organisation built new facilities to manage the landfill process and to incinerate domestic waste. In 1997, it gradually decided to focus on two areas: (i) energy and environment by developing new technologies for the treatment of waste and (ii) recycling and the production of renewable energy.

EastManage provides waste management services to households and businesses across the UK. These include activities and actions required to manage waste from its inception to its final disposal such as waste collection, urban cleansing, transfer station design and operation, waste sorting and recovery and the operation of landfill facilities. In the UK, the company collects, transports, treats and disposes waste in strict compliance with rules and regulations.

EastManage has more than 80000 employees. It encourages its employees to appreciate that by working in EastManage that they work towards a good cause—a cause that saves resources for the future generations to come. The company finds its employees in the core of its success. It provides a supportive environment and pays special attention to accepting and respecting identity of employees.

Lean journey at EastManage was in its fifth year when the interviews were conducted. In terms of lean maturity stage, it was in the In-Transition stage (Netland and Ferdows, 2016). This means the organisation had started the exploitation phase of lean service. It had
integrated lean principles to workplace practices to a significant level. When data collection was conducted, it was noticeable that the company was experiencing radical improvements to its service delivery processes. Participants were commenting on a sequence of quick gains from employing lean practices. The cultural shift seemed to have been happening as the participants were positive about lean ways of doing their work. Lean practices had enabled the company to significantly increase its recycling rate from 45% to 56% by 2015.

**CS5: HighEnd**

HighEnd is a cooperative society which distributes goods to around 5000 stores across the UK. It was established in the 1850 and has developed over 150 years to become the current organisation. By the 1990s, its share in the UK market declined significantly. To survive, HighEnd questioned its entire business model. It employed significant modernisation and rationalisation to its businesses. In 2017, HighEnd has shifted its focus of the business from the rebuilding phase into a phase of planning for renewal.

HighEnd values its customers and employees. In doing so, it does what matters for the community it serves and keeps its service delivery processes simple for its customers. It encourages its employees to act on their discretion to support the company. It showcases care towards its employees, stakeholders and community. It also centres its success on cooperation with other business in the market.

HighEnd endorses individual differences in its workforce. The company is publicly recognised as a place where diversity is accepted and nurtured. It highly promotes the notion of inclusion. It aims to portray the company as a place where its customers, employees and stakeholders feel they belong to. It engages with people from across all sections of society to make this happen.

It employs over 60000 employees and considers its employees as the core of a fair, ethically and morally strong business operation. As part of this understanding, it supports employees and provides them with various opportunities to develop, progress and shape their career and serve its customers and communities. It boasts that its employees get personal satisfaction from working for the company because they are working for an organisation that essentially is fair and does well. It also remunerates its employees generously. It is passionate about gender equality in the workplace and its statistics show that 51% of its employees are female.
HighEnd began its lean programme almost 20 months prior to conducting the interviews. The company initiated its lean programme to focus on doing what its customers and communities find as value adding services. Therefore, as part of its programme, it aimed to focus on outcomes of its service delivery processes than deliverables. It was also attempting to promote an open culture through lean practices about how services are delivered by the organisation.

Further, its lean programme was a vehicle to promote trust that everyone works to the best interest of their organisation. For that reason, it aimed to provide its employees with a timely feedback on their performance through employing lean practices. It believed that by providing timely feedback on performance, employees and teams would be motivated to focus on areas of improvement. It also aimed to use lean practices to promote a culture where employees are working in teams and teams replace the rigid hierarchy of the organisation. This was part of the belief that teams are in the centre of service delivery in the organisation. It also aimed to use its lean programme to communicate that quality is everyone’s responsibility in the organisation.

In terms of lean maturity stage, HighEnd was in the Beginner stage (Netland and Ferdows, 2016). This means that the organisation was in the exploration phase of lean journey. In this stage, the company had begun deploying lean practices in pilot areas across the organisation. Success of lean practices in the pilot areas was then intended to be transferred to other areas of the organisation. As part of the move, the cultural change, resistance to lean ways of working could have been felt during the site visits. However, the organisation was determined to keep improving its service delivery processes using lean tools and techniques.
Appendix VIII: Key definitions

This sub-section presents the definition of the key concepts, terminologies and themes mainly used in this chapter. The definitions are as follows in alphabetical order:

- **Absence management**: ‘Absence’ refers to a habitual pattern of nonattendance of an employee from work (Hadjisolomou, 2015). ‘Absence management’ refers to the activities by which the case study organisations attempt to understand such pattern of employee absence from work, aiming to reduce the number of absences and keep a balanced workload to support lean service. A balanced workload for employees avoids overloading present employees (Armstrong and Taylor, 2017).

- **Capacity planning** refers to using capacity tools by line managers and team leaders to understand the required human resources to conduct day to day service delivery, i.e. the number of people needed to carry out the required work of a working day and/or a lean project (Lorden et al., 2014). This means checking the utilization of staff members and trying to move employees across different departments and teams, as part of trading surplus capacities among departments and teams, to fulfil lean targets.

- **Career development** refers to engaging employees in process improvement and/or enrolling them in accredited lean training courses (for instance, lean awareness courses and/or advanced lean courses such as accredited lean practitioner and Lean Six Sigma courses). This thesis uses career development from an organizational development (OD) perspective, meaning that organizations structure the career progression of their staff members. And so, this denotes that the case study organisations consider ways to facilitate career development of their employees and encourage them to drive their own careers (Armstrong and Taylor, 2017). By doing so, they provide their employees (or a group of employees who work in ‘lean teams’ and are involved in lean deployment) an alternative career path. These members can work as lean consultants, lean practitioners and Lean Six Sigma experts within their organisation or in other organisations when they leave their organisation and find work elsewhere.

- **Case studies (or case study organisations)** refer to the service organisations which allowed the researcher access to their organisation to collect primary data for this thesis. These were MyFinance, FineBank, Hinance, EastManage and HighEnd (see 3.7.4 Case study profile).
• **Employee collaboration** refers to the process of two or more employees, managers, departments or sites working together to implement lean projects (Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014).

• **Employee communication** refers to any exchange of information regarding lean service among employees and employees and their managers, whether the form of the exchange is verbal or non-verbal (Thirkell and Ashman, 2014).

• **Employee empowerment** refers to allowing employees greater discretion and more resources to improve aspects of their workplace, work and organisation by employing lean practices (Stanton et al., 2014; V. Wickramasinghe and Wickramasinghe, 2017a). Employee empowerment involves “giving individuals and teams more responsibility for decision-making and ensuring that they have the training, support and guidance to exercise that responsibility properly.” (Armstrong and Taylor, 2014, p. 146)

• **Employee health and safety** refers to the actions the case study organisations take to maintain the health and safety of employees (Longoni et al., 2013). In this context, it could be in the form of (i) employees taking part in health and safety meetings or (ii) providing employees with facilities that make their jobs safer or (iii) balancing employees’ workload (see 4.3.18 Employee health and safety).

• **Employee involvement** refers to fully absorbing employees in the entire lean journey of the case study organisations (Marin-Garcia and Bonavia, 2015; Neirotti, 2018).

• **Employee motivation** refers to the approaches of the case study organisations to intrinsically drive and motivate employees to put efforts into lean-related work and projects and conduct such projects in their workplace (Sterling and Boxall, 2013). The case study organisations motivate employees to actively and effectively endorse lean practices. Therefore, employee motivation is to ignite an intrinsic drive and a psychological force in employees which determine their direction towards lean-related behaviour and outcomes.

• **Employee voice** stands for the participation and engagement of employees in organisational decisions with regard to lean practices (Wilkinson et al., 2014). It comes in various forms of activities such as (i) allowing employees to air and share their concerns on lean practices or (ii) management seek inputs from employees to improve aspects of the workplace as part of adopting lean principles. For that purpose, the case study organisations use several channels to receive employee voice. Examples of these channels are ‘idea box’ and ‘My CI’ (see 4.3.11 Employee voice).
• **Groups and teamwork** refers to the activities that bring together two or more employees with complementary backgrounds, knowledge and skills and involve them in executing lean projects and/or deployment of lean principles in the case study organisations (Procter and Radnor, 2014).

• **HR-enabled lean service** refers to enabling individuals in the workforce of the case study organisations to apply, deploy and maintain lean principles, practices, tools and techniques to service operations (Bowen and Youngdahl, 1998; de Koeijer, Paauwe and Huijsman, 2014).

• **(enabling) HRM practices** refers to the various activities that management of the case study organisations conduct (the eighteen themes in this chapter) to manage and orient employees to support lean practices (de Koeijer, Paauwe and Huijsman, 2014).

• **Huddle meetings** are daily meetings in the case study organisations. They are held every morning by team leaders with their team members to review the performance of yesterday and discuss the targets of the day ahead (Salem O. *et al.*, 2006).

• **Human resource (HR),** without (s), is a combination of the knowledge, skills and energy of an individual who works in the workforce of the case study organisations (Boxall and Purcell, 2015). **Human resources, with (s),** refers to all the individuals who form the workforce of the case study organisations (Boxall and Purcell, 2015).

• **Human resource management (HRM)** “refers to all those activities associated with the management of work and people in organisations.” (Boxall and Purcell, 2015, p. 1). Accordingly, it is the approach of management in the case study organisations to manage employees and their work as resources of the organisations (i.e. employee management, retention and utilisation) (Wilkinson *et al.*, 2009).

• **Labour relations** refers to how the case study organisations deal with their unionised workers in the context of lean service, especially when lean application requires certain changes in the day to day work of the unionised workers (Kochan and Lansbury, 1997; Johnstone and Wilkinson, 2016). Therefore, in this context, while “**Employee relations** serves the functions of communicating and working with non-union employees.” (Ogilvie, 2005, p. 141) “**Labor relations** works with employees in organized labor unions.” (Ogilvie, 2005, p. 141)

• **Lean teams (or ‘improvement action teams’)** are specialised dedicated teams of lean experts who are tasked with adopting lean principles to service operations in the case study organisations (Netland, Schloetzer and Ferdows, 2015).
• **Performance management** refers to the activities that management of the case study organisations conduct to ensure lean goals and targets are consistently met effectively and efficiently, i.e. activities by which they align their human resources to support lean service (de Koeijer, Paauwe and Huijsman, 2014).

• **Recruitment and selection** refers to the overall process and activities of attracting, selecting, appointing and orienting suitable candidates to fill vacant support, managerial and lean roles in the case study organisations (Suárez-Barraza and Ramis-Pujol, 2010).

• **Retention and release**: While ‘retention’ refers to the ability of the case study organisations to retain their employees, ‘release’ refers to their ability to release employees to take extra work or work on lean-related projects or any other lean-related tasks within their organisation or in a sister organisation (Shook, 2010; Sangwa and Sangwan, 2017).

• **Reward and recognition** refers to incentives of monetary and non-monetary nature which are given by the case study organisations to an employee (or employees) to encourage them to repeat a desired lean behaviour and/or outcome (Snell and Dean, 1992; Martínez-Jurado, Moyano-Fuentes and Jerez-Gómez, 2014).

• **Role profiling** refers to role analysis which clarifies, tailors and creates roles to support lean service in the case study organisations. It also entails defining or clarifying responsibilities, required skills and knowledge for a given role or creating a new role to support employing lean principles (Power and Sohal, 1997, 2000b).

• **Succession planning** denotes the intention and practical steps taken at the case study organisations to identify and develop their existing human resources to replace, take responsibility or fill the position of other employees who leave the organisations whether as the result of natural attrition, redundancy or any other kind of turnover in the context of lean service (Wilkinson, Redman and Dundon, 2016).

• **Training and development** refers to the activities that the case study organisations conduct to teach, develop or coach lean-related skills and knowledge to their employees (Uhrin, Bruque-Cámara and Moyano-Fuentes, 2017).