Creating readiness for public service improvement: a study in Brunei Darussalem

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CREATING READINESS FOR PUBLIC SERVICE IMPROVEMENTS: A STUDY IN BRUNEI DARUSSALAM

by
Nor Imtihan Haji Abdul Razak

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

Supervisor: Professor M. Sohail

MARCH 2013
Department of Civil and Building Engineering

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Always in my memory, my late grandmother Hjh Zainab binti Abdullah, who recently passed away, who was always there to provide moral support; I love you so much.
ABSTRACT

The study examines and identifies the perceived favourable conditions needed for employees’ readiness to support improvements. In the context of Brunei, readiness research in public service organisations is underrepresented if not, non-existent. There is a need for a more comprehensive study that integrates the combined perspective of the interrelated conceptual elements of readiness, its climate and the organisation. Four key findings were identified based on 119 interviews and 665 surveys. Firstly, it was found that as employees self-organise to cope with chaos, an unintended conducive climate that is specific to the Brunei context evolves out of employees’ readiness to adapt and survive. Secondly, the essential climatic factors that trigger the minimum level of employee readiness are identified. Thirdly, the influential climatic factors that further amplify a higher level of employee readiness are identified. Finally, based on the shared multilevel perspective of employees, the statistical analysis result confirm the hypothesis that there is a positive relationship between the identified climatic factors and employees’ readiness in terms of the way employees believe in, feel about and act towards improvement. Supported by qualitative findings, the essential climatic factors were identified as being communication, participation, clear task roles and responsibility, and top management’s trust in subordinates. Similarly, the influential climatic factors were identified as being efficacy, organisational trust, organisational trusts in top management and top management support and participation. It is concluded that employees’ readiness can be incrementally developed towards improvement success; however, the contextual conditions need to be recognised and well-tailored. The development of a novel conceptual framework and model demonstrates how employees’ multidimensional readiness can be triggered and influenced to support improvements in a complex and adaptive organisation.

Keywords: Public Service improvement, multidimensional readiness, complexity theory, organisational climate, readiness climate framework, employees’ readiness, improvement strategy.
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<td>ANOVA</td>
<td>– Analysis of Variance</td>
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<tr>
<td>DDS</td>
<td>– Department of Drainage and Sewerage</td>
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<tr>
<td>DOR</td>
<td>– Department of Road</td>
</tr>
<tr>
<td>DTS</td>
<td>– Department of Technical Services</td>
</tr>
<tr>
<td>DWS</td>
<td>– Department of Water Services</td>
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<tr>
<td>GEMS</td>
<td>– Government Employee Management System</td>
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<tr>
<td>GIS</td>
<td>– Geographical Information System</td>
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<tr>
<td>GT</td>
<td>- Geomatic Technology</td>
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<tr>
<td>ISO</td>
<td>– International Organisation for Standardization</td>
</tr>
<tr>
<td>IT</td>
<td>– Information Technology</td>
</tr>
<tr>
<td>JKR</td>
<td>- ‘Jabatan Kerja Raya’</td>
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<tr>
<td>KMO</td>
<td>– Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>KPI</td>
<td>– Key Performance Indicator</td>
</tr>
<tr>
<td>MCYS</td>
<td>– Ministry of Culture, Youth and Sport</td>
</tr>
<tr>
<td>MGD</td>
<td>– Millennium Development Goal</td>
</tr>
<tr>
<td>MIB</td>
<td>- ‘Melayu Islam Beraja’ (Malay Islamic Monarchy)</td>
</tr>
<tr>
<td>MIPR</td>
<td>– Ministry of Industry and Primary Resources</td>
</tr>
<tr>
<td>MLD</td>
<td>– Million litres per day</td>
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<tr>
<td>MOC</td>
<td>– Ministry of Communication</td>
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<td>MOD</td>
<td>– Ministry of Defence</td>
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<td>MOD</td>
<td>– Ministry of Development</td>
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<td>MOE</td>
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<td>MOFAT</td>
<td>– Ministry of Foreign Affairs and Trade</td>
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<tr>
<td>MOH</td>
<td>– Ministry of Health</td>
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<tr>
<td>MOHA</td>
<td>– Ministry of Home Affairs</td>
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<tr>
<td>MORA</td>
<td>– Ministry of Religious Affairs</td>
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<tr>
<td>NDMC</td>
<td>– National Disaster Management Committee</td>
</tr>
<tr>
<td>OECD</td>
<td>– Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PCA</td>
<td>– Principal Component Analysis</td>
</tr>
<tr>
<td>PMO</td>
<td>– Prime Minister’s Office</td>
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<tr>
<td>PROMISE</td>
<td>– Project Management Information System Enterprise</td>
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PWD – Public Works Department
R and D – Resources and Development
SPSS – Statistical Package for the Social Science
UNESCO – United Nation Educational, Scientific and Cultural Organisation
WHO – World Health Organisation
CHAPTER 1- INTRODUCTION

1.0  GENERAL INTRODUCTION
Chapter 1 introduces the context of this research. It provides an overview of the research background in the area of study and the issue that justifies this research. This chapter then discusses the aim and objectives that led to the research question, hypothesis, conceptual framework and methodology. The scope of the study, its limitations and significance is explained and the chapter concludes with an overview of the thesis structure.

1.1  RESEARCH BACKGROUND
Transforming employees’ readiness to become an adaptive workforce is more of a concern for public service organisations as challenges become more complex and unpredictable in the 21st century (Bouckenooghe et al., 2008; Bourgon, 2010; Global Agenda Council on the Future of Government, 2011). Complex challenges are influenced by economic, financial, environmental, technology and social instability (Bourgon, 2010, 2011; Jones, 2011). Given the complex nature of public service organisations, improvements and responsiveness are difficult to achieve (Yusoff, 2005). Improvements are initiated in the form of change involving restructuring the organisation, adopting new procedures or processes and technology advancement. It has been argued that lack of attention on the issue of readiness attitude and resistance contribute 70% of change or improvement failure (Beer & Nohria, 2000; Cope, 2003; Burnes, 2004; Ford et al., 2008). Effective improvement does not necessarily depend on improvement processes such as resource reallocation, the intervention of new technology, or reorganising units, but requires employees to change their behaviour and their readiness to support improvements (Cladwell et al., 2008; Rafferty et al., 2013). Readiness is reflected in the beliefs, attitudes and intentions of organisational members regarding the extent to which changes are needed and the organisation’s capacity to successfully make those changes (Armenakis & Bedian, 1999; Holt et al., 2007). Emphasis on the importance of the readiness attitude of employees for effective improvement is highlighted internationally:
‘Strengthening public servants’ knowledge, skills, networks and attitudes is key to any improvement in government performance, because it is through public servants that services are planned and delivered, critical innovations conceived and realised, needed reforms carried out and trust in government restored’

(World Public Sector Report, 2010)

Studies of readiness are increasing, as readiness attitude contributes to the success of improvement programmes and initiatives (Devos & Bouckenooghe, 2006; Cinite et al., 2009; Ochurub et al., 2012). The need for monarch-governed organisations to be able to adapt and succeed prompts the research question: What are the essential and influential climatic factors that could trigger and influence employees’ readiness to support public service improvements? The answer to this question is an essential step towards excellence in public service delivery and national development growth. Although this research question is seldom addressed, there is a general consensus that readiness attitude is crucial to the success of organisational improvements (Holt et al., 2007; Cinite et al., 2009; Pare et al., 2011). However, there is still a lack of comprehensiveness in the development of the readiness concept and readiness assessment for improvement (Balassanian, 2006; Weiner, 2009; Gagnon et al., 2011). As yet there is no definite, specific universal definition of the concept of readiness attitude due to its complexity. The determinants of employees’ readiness are diverse and derived from different study and political contexts. Thus, this research aims to answer the research question of identifying the necessary triggers and influencing factors needed to stimulate and generate employees’ readiness for effective improvements in the Brunei context.

This study is based on a combination of two theories, i.e. multifaceted readiness theory and complexity theory. For multifaceted readiness theory, the study covers the combined effects of a wide range of climatic factors on a multiple dimension of employees’ readiness, which is lacking in previous research (Holt et al., 2007; Bouckenooghe & Devos, 2008; Weiner, 2009; Rafferty et al., 2013). Complexity theory, a theory about survival, evolution, development and adaptation (Allen & Strathern, 2003; Wallace et al., 2007), is used as an additional perspective to understand and explain the manifestation of
employee readiness in a complex and adaptive organisation. The study integrates the theories to identify the needed condition that promote employees’ readiness for effective improvements in a complex and adaptive organisation. A synergy of both planned and unplanned improvement is used to get close to reality. It is argued that when employees’ desired climate is triggered and influenced, improvements are likely to succeed and be sustained. Consistent with previous research into readiness, the following hypothesis is proposed:

**Hypothesis:** Identified climatic factors have a positive relationship with employees’ multidimensional readiness for effective public service improvements.

No research of this nature has been conducted in Brunei’s public service organisations. The significance of this research brings us closer to reality in understanding the complexity of employee readiness within a complex and adaptive organisation.

### 1.2 RESEARCH PROBLEM, AIM AND OBJECTIVES

#### 1.2.1 Problem statement

On an international level, changing the mindset of leaders and public servants is an essential step on the successful path of new reform or modernising for better public service performance. The aim is to encourage new thinking and the improved behaviour of open communication, initiative taking and learning (World Public Sector Report, 2005). The ability of organisations to adapt and challenge traditional ways of management is becoming increasingly necessary (Bourgon, 2010; Global Agenda Council on the Future of Government, 2011; Jones, 2011). The complexity of problems can be influenced by the unpredictability of economic, environmental and social instability as well as technology and information communication technology advancement (World Public Sector Report, 2008; Bourgon, 2011). Examples of this complex instability are climate change, economic downturn, the fast pace of changes in social demands and expectations and moving towards e-government and e-technology.
Similarly, Brunei Darussalam, a small Islamic absolute monarch-governed country of 393,400 people (Department of Economic Planning and Development, 2011), faces similar challenges. In alignment with the Civil Service Vision for the 21st century to achieve the Nation’s Vision 2035, Brunei’s civil service is preparing for a paradigm shift and mindset change among public servants. Improvement efforts are geared towards a corporate culture that promotes continuous development and improvement in service delivery (Brunei Country Report, 2007). However, in the alignment of strategic improvement plans among public service organisations, preparing public servants to adopt their mindset is difficult and unclear. As highlighted and emphasised by His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam on the 17th Civil Service Day, 2010:

"Whatever programmes in improving public service, whether it is in the strategic plan or ongoing improvement plans, it is important to ensure all fundamental elements are made a priority, and should not be neglected ... Among the elements are attendance, commitment, dedication, discipline and integrity. If these elements are not present in the public sector or are not strong enough, whatever programmes we are going to do in innovation management and technology will not produce the results that we want"

(Brunei Times, 2010)

What remains for Vision 2035 to be realised is the effective implementation of improvement initiatives. The realisation falls within the control and support of public service employees as the drivers of change and successful improvement. Understanding the complexity of employee readiness within complex organisations and the ability to facilitate improvements is the motivation behind conducting this study in Brunei Darussalam.

1.2.2 Aim

The main aim of this research is to identify the essential and influential climatic factors that stimulate employee readiness for effective public service improvements in Brunei Darussalam. It is argued that by recognising and facilitating the necessary conducive nature that promotes employee readiness, improvements are likely to succeed. The research aim is supported by several objectives, which are discussed in the following subsections.
1.2.3 Objectives

Based on this broader research purpose, the conceptual framework was developed from the literature review and study methods, for which the following objectives were identified:

a) To identify the current issues and review the literature on the readiness concept, its climate for improvement and the characteristics of public service organisations. Different perspectives are looked at to help understand the linkages in a more comprehensive and holistic manner.

b) To investigate and identify the essential and influential climatic factors as perceived by employees that promote employees’ readiness to support improvements in Brunei’s public service organisations.

c) To explore the workings of complexity theory in explaining how employee readiness can be stimulated to support improvements in public service organisations.

d) To use the results to test the hypothesis, answer the research question and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.

1.3 RESEARCH QUESTION

This study seeks to answer the main research question, supported by subsidiary questions derived from the objectives. The main research question is: What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations? Figure 1.0 shows the linkages between the methods, the research question and the objectives.
<table>
<thead>
<tr>
<th>METHOD</th>
<th>RESEARCH QUESTION</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td><em>(Subsidiary)</em> What do we understand about promoting employees’ readiness to support improvements in public service organisations?</td>
<td>1. To identify the current issues and review the literature on the readiness concept, its climate and the characteristics of public service organisations.</td>
</tr>
<tr>
<td>Qualitative Quantitative Literature review</td>
<td><em>(Main)</em> What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations?</td>
<td>2. To investigate and identify the desired essential and influential climatic factors that promotes employees’ readiness to support improvements in Brunei’s public service organisations.</td>
</tr>
<tr>
<td>Qualitative Literature review</td>
<td><em>(Subsidiary)</em> How is employee readiness effectively stimulated to support any type of public service improvements in a complex and adaptive organisation in the Brunei context?</td>
<td>3. To explore the workings of complexity theory in explaining how employee readiness can be stimulated to support improvements in public service organisations.</td>
</tr>
<tr>
<td>Literature review Qualitative Quantitative</td>
<td><em>(Subsidiary)</em> How can employee readiness be promoted for effective improvements in public service organisations in the Brunei context?</td>
<td>4. To use the results to test the hypothesis, answer the research question and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.</td>
</tr>
</tbody>
</table>

Figure 1.0 The linkages between methods, the research question and objectives.

### 1.4 RESEARCH SCOPE AND LIMITATIONS

The research scope involves multilevel employees across several departments in the Public Works Department. Employees, in the context of this study, are employees at three levels, top managers, middle managers and non-managers that are involved in improvement initiatives. A multilevel perspective of employee readiness refers to the alignment of employees’ perception as an individual, a team member and the organisational collective perspective. A multidimensional perspective of employee readiness refers to the way employees believe in (cognitive), feel about (affective) and act towards (intention) the improvement.
The proposed conceptual framework covers three elements: the characteristics of the organisation, the multifaceted aspect of employee readiness and the organisational climate for improvement (content, context and process). A working model that extends from this framework demonstrates the need to stimulate employee readiness. However, the results of this study are limited to the Brunei Darussalam context and public service organisations, but may be applicable in other organisations with a similar background and context. A longitudinal study that examines the different phases of the improvement implementation process would have been ideal, but impossible due to the limited time frame of this study. Figure 1.1 shows an overview of the research gaps which this study intends to fill to help towards public service excellence in the field of organisational improvement and management.

In Figure 1.1, the research gap highlights the underdeveloped perspective of three linkages: between SG1 – the characteristics of the organisation; SG2 – the organisational climate for improvement (improvement content, context and process); and SG3 – the multifaceted aspect of employee readiness. In filling the research gaps, this study is positioned based on the following perspective:

SG1 – Viewing public service organisations as complex and adaptive (Rhodes et al., 2012).
SG2 – Viewing from a synergy of both planned and unplanned improvements (Bryson et al., 2006) and using a wider selection of climatic factors under the improvement context and process (Bouckenooghe, 2008).
SG3 – Viewing from the positive perspective of the multilevel and multidimensional aspects of employee readiness under different organisational contexts (Bouckenooghe, 2008; Shah & Iran, 2010; Rafferty et al., 2013).
Character: Public service organisations as complex and adaptive.

Need for an appropriate approach to promote employee readiness in a complex and adaptive organisation. Viewing public service organisations as complex and adaptive in readiness research is understudied (SG1).

**AIM:**
Identify essential (triggers) and influential climatic factors that promote employee readiness for effective improvements.

**ORGANISATIONAL CLIMATE (SG2)**

- **Improvement content:**
  Underdeveloped perspective based on a synergy of planned and unplanned improvement.

- **Improvement context and process:**
  Lack of study using a wider selection of climatic factors.

**MULTIFACETED DIMENSION READINESS (SG3)**

- **Multidimensional readiness:**
  Lack of study combining the aspect of cognitive, affective and intentional dimension of employee readiness.

- **Multilevel readiness:**
  Lack of study from a shared perspective from the individual, group and organisational readiness level.

**STUDIED CONTEXT:**
Lack of study in absolute monarch-governed organisational context. No study in Brunei’s public service organisations.

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>IMPROVEMENT STRATEGY</th>
<th>APPROACH</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character: Public service organisations as complex and adaptive.</td>
<td>AIM: Identify essential (triggers) and influential climatic factors that promote employee readiness for effective improvements.</td>
<td><strong>ORGANISATIONAL CLIMATE (SG2)</strong></td>
<td>An appropriate readiness approach to effective improvements.</td>
</tr>
<tr>
<td>Improvement content: Underdeveloped perspective based on a synergy of planned and unplanned improvement. Improvement context and process: Lack of study using a wider selection of climatic factors.</td>
<td><strong>MULTIFACETED DIMENSION READINESS (SG3)</strong></td>
<td><strong>STUDIED CONTEXT:</strong></td>
<td></td>
</tr>
<tr>
<td>Multidimensional readiness: Lack of study combining the aspect of cognitive, affective and intentional dimension of employee readiness. Multilevel readiness: Lack of study from a shared perspective from the individual, group and organisational readiness level.</td>
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</tr>
<tr>
<td>STUDIED CONTEXT: Lack of study in absolute monarch-governed organisational context. No study in Brunei’s public service organisations.</td>
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</table>

Figure 1.1 Linkage between research gaps.
1.5 SIGNIFICANCE OF THE STUDY
From the academic perspective, the significance of this study is that it highlights the conceptual framework and model, demonstrating the means to stimulate employee readiness for effective improvements in a complex and adaptive organisation. Based on a comprehensive study that is lacking in research, the framework extends the application of complexity theory in public service organisations. The study provides evidence of the needed condition that promotes employees’ readiness to adapt incrementally to the uncertainty of improvements. Understanding the triggers and influential factors based on employees’ perspective brings us closer to achieving an adaptive workforce that allows the organisation to evolve and achieve excellence. From the practical perspective, this study provides the crucial information needed by practitioners and human resource managers in the public sector for a tailored readiness approach in succeeding improvements and sustaining excellence in the public sector. This study has identified a further gap for other researchers to conduct further studies in similar organisational contexts and compare the findings.

1.6 OVERVIEW OF THE THESIS STRUCTURE
The thesis consists of eight major chapters, which are described below.

Chapter 1: Introduction
This chapter introduces the basis for the research and provides a brief overview of the research purpose, including the background of the research, why this research was conducted relating to the problem statement, its aim and objectives, the research question and the scope and significance of the study.

Chapter 2: Literature Review
This chapter presents the current developments in readiness research, including the understanding of the multifaceted elements of the readiness concept and the necessary organisational climate for improvement. Complexity theory provides an additional perspective in understanding how employee readiness can be facilitated in complex and adaptive organisations such as public service organisations. Identifying the research gap
from the varying elements and perspectives led to the establishment of the objectives, research question, hypothesis and conceptual framework. The range of potential climatic factors that drive employee readiness to support improvements identified from the literature is explored in the Brunei context. The findings of the literature review serve as the basis for this research.

Chapter 3: The Conceptual Framework
This chapter presents and describes the interrelating components within the readiness climate conceptual framework developed from this study. The components include the characteristics of public service organisations, the necessary organisational climate for improvement and the multifaceted aspect of employee readiness.

Chapter 4: Research Methodology and Research Design
This chapter describes the methodology and research design that was developed and used in the study. The development and the proposed methodology used for this study and its suitability to address the aim and objectives of this research are discussed. The basis for selecting the most appropriate methodological approach takes into account the significance and relevant factors that have an impact on the type of research method used. This chapter also includes a synopsis of the background of the study context. It describes the role of Brunei’s civil service, the issues and challenges faced by public service organisations and the need for strategic approaches in developing employee readiness for effective improvements.

Chapter 5: Phase 1 Study (Data Presentation, Analysis and Results)
Chapter 5 presents the findings of the Phase 1 study involving quantitative and qualitative data collected and analysed across three departments in the Public Works Department in Brunei Darussalam. Cross analysis of both interview and survey data resulted in the identification of the dominant essential and influential climatic factors. These climatic factors were further developed into itemised statements that measure each climatic factor. The developed survey questionnaire was tested for participants’ agreement in Phase 2 study.
Chapter 6: Phase 2 Study (Data Presentation, Analysis and Results)
This chapter describes the Phase 2 study covering a larger sample population across four organisations. Employees’ agreement over the itemised measurement statements that measure each climatic factor is focussed upon in the final stage. Descriptive and statistical analyses are described and the results presented to confirm the reliability and validity of the climatic factors identified. Hypothesis testing of the identified climatic factors as a function of multidimensional readiness is described in detail, thus answering the research question.

Chapter 7: Discussion of Findings
Chapter 7 presents a summary of the research and a discussion of the general findings regarding the identified climatic factors (both essential and influential), leading to the finalised readiness conceptual climate framework. The framework is extended with a model demonstrating how employee readiness can be promoted incrementally. This chapter defines the extent to which the research objectives have been achieved, the knowledge gaps filled, the research question answered and the hypothesis confirmed. This chapter also highlights the significant contribution of the research to readiness knowledge and practitioners.

Chapter 8: Conclusion
This chapter completes the thesis by drawing conclusions about the research findings, the limitations of the research and the recommendations for further work. Figure 1.2 shows the structure of the thesis.
CHAPTER 1: INTRODUCTION
Introduction and problem statement, research aim and objectives, research question, hypothesis, conceptual framework, methodology, research scope and limitations and thesis contribution.

CHAPTER 2: LITERATURE REVIEW
Literature review of public services, employees’ readiness for public service improvements, organisational climate and public service organisations as being complex and adaptive.

CHAPTER 3: CONCEPTUAL FRAMEWORK
The development of the research conceptual framework and description of its components.

CHAPTER 4: METHODOLOGY AND RESEARCH DESIGN
Methodological approach and research strategy, data collection, the Brunei context and chapter summary.

CHAPTER 5: PHASE 1 STUDY
Presentation of data collected, analysis and results of initial quantitative and qualitative study.

CHAPTER 6: PHASE 2 STUDY
Presentation of data collected, analysis and results of quantitative study.

CHAPTER 7: DISCUSSION OF FINDINGS
Findings leading to the finalised conceptual framework and model, filling the knowledge gap, answering the research question and confirming the hypothesis.

CHAPTER 8: CONCLUSION
Thesis conclusion summarising the findings, recommendations for further work.

Figure 1.2: Thesis structure.
CHAPTER 2- LITERATURE REVIEW

2.0 CHAPTER OVERVIEW
This chapter serves to partially fulfil the first objective of this research, providing a critical review of the literature on the understanding of public service organisations and their character, the readiness concept and the organisational climate needed for effective improvements. The chapter structure is outlined in Figure 2.0.

Figure 2.0 Structure of Chapter 2.
1. The first section provides a theoretical discussion of the complexity of public service organisations and the rationale of applying the understanding of their characteristics to promote employee readiness for effective improvements.

2. In the second section of this chapter, a theoretical discussion of the different perspectives conceptualising readiness is presented, positioning the perspective of this thesis.

3. The third section provides a theoretical discussion of the concept of organisational climate linking to the perception of the nature of improvement, the conditions under which improvement occurs (ie. context) and the process of implementation that affects employees’ multidimensional attitude towards the improvement. The organisational climatic conditions refer to employees’ expectation of their desired working environment in an organisation that can manifest into a culture. A range of potential climatic factors that affect employee readiness were selected from the literature and tested in the Brunei organisational context.

4. The fourth and fifth sections of this chapter conclude the findings of this chapter and highlight the research gaps.

2.1 PUBLIC SERVICE ORGANISATIONS AND THEIR COMPLEXITY

Organisations can be referred to as complex, open, human, social and non-linear systems and their behaviour described as artificial and socially constructed around the intended purpose (Weick, 2001; Stacey, 2003; Morgan, 2006). Rhodes and MacKechnie (2003) define the public service system as consisting of ‘multiple organisations engaged in the provision of a specific set of goods and services that are of value to the majority of consumer-citizens’. Public service organisations have often been described as highly complex and adaptive organisations which need to be understood for effective improvements (Hayes, 2003; Rhodes et al., 2012). Public Service organisations, being complex, have been described by researchers (Collinson, 2012; Rhodes et al., 2012) as serving multiple objectives and functions, having diversity of clients and stakeholders and
delivering a wide range of policies and services. Public service organisations exist within the complexity and unpredictability of socio-political-driven environments, making them more complex than the private sector. The values and complexity of tasks and challenges is more public driven than market driven; thus, the complexity of public service organisations is often overlooked in management approaches (Rhodes et al., 2012).

According to Rhodes et al. (2012), despite long-term goals, public service organisations are overwhelmed by short-term issues and complex challenges. In order to survive and ensure the well-being of the public and the prosperity of the nation, the role of public service organisations is changing towards partnership and collaboration with the citizens, other entities and the private sector (World Economic Forum Annual Meeting, 2011). On one hand, the challenges are in the form of increased public expectation of greater transparency, accountability, public participation in decision-making and high service value in the provision of water, roads, sanitation, health and education. On the other hand, public service organisations have to respond to national crises such as food and water shortages, the international migration of people and intra-state conflict as a result of climatic changes. At the international level, governments must deal effectively with the globalisation processes and the expectation of transparency, accountability and high service value and issues related to international peace and security (United Nation Public Service Forum, 2012).

Within the aim of improving the ‘steering’ capacity of public sector managers and policymakers, there is strong emphasis on performance benchmarking, improved financial and human resource management techniques, decentralisation of authority and accountability from existing theoretical frameworks and management approaches (Rhodes et al., 2012). However, the efforts are not reflected, with more than 70% of improvements failing (Beer & Nohria, 2000; Bourne et al., 2002; Choi & Ruona, 2011). In the effort to move towards modernisation, any additional complexity in the form of new initiatives, extra layers of management, IT system advancement and administrative changes such as reshuffling top and middle managers makes it more difficult for public service organisations to deliver improvements. Complexity increases with the addition of new
strategies, structures, people, processes and products into the organisation. In such a complex environment there is a need for organisations to be more responsive and ready by continuously evolving to create value in their services and survive uncertainty (World Economic Forum, 2011). As emphasised by the United Nations:

`The multiple demands and challenges that national governments face at present call for a revitalized public administration that is capable of designing and implementing innovative strategies, practices and tools that enable them to transform challenges into opportunities for socio-economic development.’

(United Nation Public Service Forum, 2012)

Rhodes et al. (2012) suggest the adoption of a complex adaptive systems (CAS) approach to public services. The approach allows the enabling factors for effective public improvements to be understood. Thus, understanding the complexity and characteristics of public service organisations and identifying the conducive enablers brings us closer to an effective means of achieving improvement success.

2.1.1 Public service organisations as complex and adaptive

This study views absolute monarch-governed public service organisations as being complex and adaptive (Lin & Lee, 2011). Complexity implies a diverse variety of elements. Being adaptive refers to the capability to adapt and learn from experience, and the system is a collective of interacting agents (persons, species, processes, organisations, departments, units) which together function as a whole (Begun et al., 2003; Lucas, 2000; Lichtenstein & McKelvey, 2005). From the above, the complex and adaptive character of public service organisations in the studied context refers to the hierarchy of collective interacting agents such as the government, ministries, departments, sections and units, functioning collectively as a whole. These hierarchies overlap in that the vertical structures interconnect with other hierarchies in multiple horizontal networks (Lin & Lee, 2011).
Complexity theory has been used to explain the workings of complex adaptive systems (Waldrop, 1992; Lewin, 1993; Kauffman, 1995; Klijn, 2008; Mitleton-Kelly, 2011) such as public service organisations. In responding to complex challenges, the ability to respond adaptively requires an adaptive organisation and adaptive people with the right mindset (Bentley & Wilsdon, 2003). The resulting conducive environment in an organisation is more likely to promote employee readiness (Chapman, 2003; Goodwin, 2000). In order for improvements to be effective, there is a need to understand how employees’ readiness for improvement evolves within the complexity of public service organisations. Research into employees’ readiness for improvements is under-studied, particularly for absolute monarch-governed organisations.

2.1.2 Complexity, chaos theory and public service organisations

Complexity and chaos theory has been increasingly used for management concerns and practices (Kelly, 2005; Stacey, 2007; Dann & Barclay, 2006; Rhodes et al., 2012), for example in organisational change, improvements and performance. Complexity theory emphasises a holistic and integrative approach between the systematic and human behaviour of management. Systematic management refers to the overall goals and organisational strategies, and human behaviour management refers to the motivations of people and organisations, organisational behaviour and attitudes (Allen & Strathern, 2003).

Complexity theory, originating from the work of the Santa Fe Institute in the 1970s and 1980s, is a theory of survival, evolution, development and adaptation. This is the key principal of complexity theory. Complexity derives from the Latin root meaning ‘to entwine’. It describes the notion that an organism interacts dynamically with its environment, influencing and in turn being influenced by its environment (Morrison, 2002). Hodgson (2000) describes complexity theory as a concept of emergence and unpredictability and refers to it as ‘life at the edge of chaos’. In complexity theory, a system can be described as a collection of interacting parts which together function as a whole; it has boundaries and properties (Lucas, 2000). Complexity theory examines phenomena as ‘complex and adaptive system[s]’, with components at one level acting as the building blocks for components at another (Waldrop, 1992; Kauffman, 1995; Morrison,
Chaos theory, derived from Lorenz (1963), refers to a system that displays unpredictable and non-linear behaviour and resembles the ‘butterfly effect’, i.e. a small change such as a decision or action can trigger big effects in the overall system, or vice versa (Rosenhead, 1998). The theory describes the system’s sensitivity to the initial conditions (Stacey, 2000). This theory is used to explain the process of how order emerges from lower levels of complexity and existing forms of life, organisation, behaviour and systems through the influence of feedback, readaptation and self-organising (Kauffman, 1995; Morrison, 2002; Richardson, 2005).

The emergence of order as a result of self-organising can be compared to Reynold’s computer program that explains how the flight of a flock of birds can be determined by simple rules, i.e. maintaining a minimum distance, the same speed and moving towards the centre of the flock (Waldrop, 1992). Through self-organising, order is achieved through distributed control rather than relying on a single leader or central control (Lewin & Regine, 2000, cited in Morrison, 2002). A similar situation can be seen in the unpredictable behavioural complexity displayed by complex organisational systems. This behavioural complexity is characterised by its sensitivity to the initial conditions, the diversity of qualitative different behaviours, self-organisation and emergence (Richardson, 2005). Improvement success can only be achieved by having the right attitude and the ability to work within a complex system and nurture flexibility, adaptability and innovation (Senge, 1996; Britton, 2005). Researchers have argued that radical change can become continuous through the dynamic interaction of amplifiers, contextual conditions and small changes (Plowman et al., 2007). Similarly, can employee readiness be triggered as an initial condition by the simple rules of essential climatic factors, and be influenced to a higher level of readiness by influential climatic factors? Identifying the required conditions that can trigger and influence employee readiness to a higher level may lead to a less commanding approach to managing employee readiness for effective improvements. Furthermore, complexity theory offers an additional perspective and approach to traditional management, which is argued to be no longer compatible with surviving complex challenges (Rosenhead, 1998; Jones, 2011).
Traditional management refers to the rigid conformance to the core business and the long-term strategic plan. Complexity theory encourages a learning culture where successful strategies tend to evolve from the dynamic interactive activities of people within the organisation. Chaos and complexity theory is used to emphasise the importance of maintaining organisational readiness to counter the constant state of flux where organisational members’ behaviour is argued to be readily improved at the edge of chaos (Rosenhead, 1998; Eby et al., 2000). Merry (1998) suggests that functioning at the edge of chaos is better achieved in an organisation with a fractal networked structure. Fractal forms in this context are characterised by their representation in several departments, a department, subsections, subunits and subsystems. A fractal network structure is where the network of communication and administration both at the macro and micro level runs vertically, top-down, bottom-up and sideways in an integrated manner within the organisation and other departments. For this reason, communication is vital for effective management, particularly in unplanned improvement (Morrison, 2002).

According to Morgan (1997), the bifurcation point occurs at the edge of chaos where the system changes quickly and unpredictably from one attractor pattern to another in an organisation, and is often indicated by tensions and paradoxes. The attractor resembles a magnet in the complex system. Behaviour is attracted and is repeated. According to April et al. (2000), moments of decision occur at this bifurcation point (i.e. the concurrence of problems, situations, participants and choice opportunities). In this situation, a bottom-up process through groups and teams dictates the nature of the emerging self-organising (Stacey, 1992; Marion, 1999). For this reason, public service agents working in complex social systems need to think, plan and act in non-linear ways that are consistent with the complexity of the situation that they are in. For organisations to adapt and respond well to the complexity of challenges there is a need to prepare employee readiness for effective improvements.
2.1.3 Employees’ readiness for public service improvements

Public service improvement, as defined by Boyne (2003a), is `a closer correspondence between perceptions of actual and desired standards of public service’ and is dependent on the views of the stakeholders. According to Boyne (2003a), the criteria for public service improvement measurement is politically determined; thus, there are no standard criteria for measuring public service improvement. Researchers (Hughes, 1998; McCourt, 2007; Samaratunge & Hughes, 2001; Samaratunge et al., 2008) have acknowledged that the traditional approach of managing is no longer compatible with adapting to current challenges. New Public Management, a modernised approach to managing, is increasingly gaining attention in public service improvement, particularly for public sector reform (Pollitt & Bouckaert, 2000, 2011; Wise, 2002; Palermo et al., 2009). However, for organisations to gain benefits a change of mindset is required, where employee readiness is an important factor for successful improvement (Armenakis et al., 1993; Cunningham et al., 2002). According to Demmke et al. (2008), evidence from studies has shown that there is no one-size-fits-all new public management and that the different cultural, system and political background of each organisation results in the differing adoption of public management modernisation paths. Their reference in the World Public Sector 2005 report ’Modernising Government – The Way Forward’ concludes that ’modernisation is dependent on context’ and that ‘there are no public management cure-alls’ (OECD, 2005).

The study of human behaviour in terms of employee readiness involving individual and work group attitudes, beliefs and attributes is also creating new interest in the field of academic research and management (Eby et al., 2000; Rafferty & Simons, 2006; Devos & Bouckenooghe, 2006; Holt et al., 2007; Cinite et al., 2009). According to Armenakis et al. (1993, 1999), readiness is a critical factor involved in the employee’s initial support for improvement initiatives. Employee readiness for public service improvement reflects the way the employee believes in and feels that improvement is necessary, which in turn influences their behaviour to support the improvement. There is general consensus that readiness attitude plays a major role in driving positive actions and commitment to the success of improvement programmes and changes (Jones et al., 2005; Holt et al., 2007; Cinite et al., 2009).
2.2 WHAT IS READINESS ATTITUDE?

Readiness attitude can be defined as a perceptual orientation and response in relation to a particular object or class of objects and may vary among individuals (Eysenck et al., 1975). Fishbein and Ajzen (1975) emphasise the importance of readiness attitude, which is often used to understand and predict a person’s reaction to an object or improvement and how behavior can be influenced, suggesting that readiness attitude is manageable. The definition and the understanding of the readiness concept have been derived from several perspectives. According to Armenakis et al. (1993), readiness is defined as the cognitive precursor to the behaviours of either resisting or supporting change effort. Readiness has been described as the extent to which employees hold positive views, which are reflected in employees’ belief in, attitude to and intentions about the need for organisational change and the organisation’s capacity to facilitate those changes (Armenakis et al., 1993; Armenakis & Harris, 2002; Jones et al., 2005). Further development in readiness theory defines readiness attitude as a comprehensive concept derived from different perspectives and context. However, there is a lack of comprehensiveness in the assessment of readiness for change (Gagnon et al., 2011). There is consensus among researchers that readiness is a multidimensional and multilevel construct (Bouckenooghe, 2008; Weiner, 2009; Rafferty et al., 2013). Its multidimensional aspect refers to the cognitive (the way a person believes), affective (the way a person feels) and behavioural or intentional (the way a person inclines to act) aspects towards the object of attitude (Pideret, 2000; Oreg, 2006; Bouckenooghe, 2008). The multilevel perspective refers to individual, group and organisational readiness, which may share the same perspective or differing perspectives that require alignment in both the macro and micro domains (Weiner, 2009; Ford et al., 2008; Rafferty et al., 2013). Employee readiness is also influenced by the climate of change content, context and process as well as the individual’s attributes (Walker et al., 2007; Bouckenooghe, 2008; Weiner, 2009). However, the determinants of employee readiness have been argued to be dependent on the political and organisational context (Fatima, 2002; Shah & Iran, 2010). Readiness is also defined as either positive or negative (Turner et al., 2002; Luthans & Youssef, 2007). Readiness has been argued to link interactively with the dynamic character of an organisation, which is complex and adaptive and can be explained through the construct of complexity theory (Allen & Strathern, 2003;
Wallace et al., 2007). For this study, readiness attitude is defined as `a multilevel and multidimensional construct which can be positive or negative and can be influenced by the characteristics of the organisation and the organisational climate for improvement’. The organisational climate in this study refers to the improvement content (type of improvement) and the contextual and process climatic factors. Readiness cannot be measured over a single statement of attitude. However, understanding attitude and the factors that tend to influence a person’s readiness may help to predict and foster a person’s behaviour to act accordingly (Weiner, 2009).

2.3 READINESS FOR AND RESISTANCE TO IMPROVEMENT: THE RELATIONSHIP

Smith (2005) states that people in organisations are potentially the key to effective improvement or the biggest obstacles to success. If employees do not believe in the need for change or if they perceive that the organisation is not ready or capable to facilitate such improvement, then such improvement is most likely to fail without their support (Armenakis et al., 1993; Eby et al., 2000; Cunningham et al., 2002). One major factor is resistance by people (Piderit, 2000; Beer & Nohria, 2000). Devos and Bouckenooghe (2006) argued that the level of employee readiness in public sector organisations is much lower and resistance is higher than in the private sector due to their differences. In the public sector there is less space and autonomy for managers to implement and direct improvement initiatives and they operate in what is described by Kooiman and Eliassen (1987) as a ‘fish bowl’. Every purpose has to be legalised by multiple stakeholders before improvements such as organisational redesigning, efficiency improvements and other major improvement can be implemented, thus constraining the conduciveness to promote readiness.

Some researchers describe resistance as an integral part of the readiness process (Kirkpatrick, 1985; Coetsee, 1999; Jansen & Karen, 2000). According to Jansen and Karen (2000), by distinguishing between resistance and readiness, researchers argue for a more dynamic, proactive perspective of improvement. Improvement agents are seen as coaches, mentors and champions for improvement rather than monitoring and reacting to the signs
of resistance. Researchers also suggest the need to research readiness for improvement in multiple public organisations across domain areas (Waneous et al., 2000; Fatima, 2002; Shah & Iran, 2010).

2.4 DEVELOPMENT OF READINESS CONCEPT FOR IMPROVEMENT

Researchers have argued for a duality approach that can provide a holistic and comprehensive perspective to understanding the complexity of readiness attitudes towards improvement (Arnold et al., 1995; Lewin & Regine, 2000; Kondakci, 2005; Graetz & Smith, 2007; Bouckenooghe, 2008). This approach would cover the predictable and unpredictable, linear and nonlinear, positive and negative, and common and surprising aspects of improvement affecting the readiness attitude of employees. According to some researchers (Weiner, 2009; Bouckenooghe, 2008; Rafferty et al., 2013), the concept of readiness attitude can be viewed from the following perspectives:

1) The improvement content or nature of improvement (i.e. planned or episodic versus unplanned or continuous improvement)

(2) Level of readiness approach (i.e. multilevel readiness at the individual, group and organisational level; multidimensional readiness of cognitive, affective and intentional aspects; person or organisation-centred approach)

(3) Polarity of attitude (i.e. positive attitude versus negative attitude)

(4) Organisational climate factors (a range of readiness climatic factors under the improvement context and process)

Each of these will be discussed in relation to the key concept of this study.
2.4.1 Improvement content

Improvement content refers to the nature of the improvement implemented. There are two types of improvement: traditional planned, episodic, discontinuous and intermittent improvement, and the new emergent improvement pattern that is continuous, emergent, unplanned, evolving and incremental (Weick & Quinn, 1999; Bamford & Forester, 2003; Seo et al., 2004). Recent management literature indicates that organisational improvement is not fixed or linear in nature but contains an emergent element associated with complexity theory. Dawson (1996) supports this by acknowledging that no matter how well planned an improvement intervention is, it can never be fully isolated from the effects of uncertainty and chance influenced by internal and external factors.

Employee readiness may emerge as a constant flux in response to a combination of the nature of change (Madsen et al., 2006; Brysson et al., 2006). The outcome is unpredictable and may even cause a 'butterfly effect' that can be associated with complexity theory (Dawson, 1996; Eby et al., 2000). Thus, organisations require the right level of employee readiness to survive in such conditions. According to Burke (2002), planned change never emerges as planned, as improvisation continues for the unanticipated events; thus, it is important to sustain momentum. Under a synergy of both planned and unplanned improvement, this study aims to identify the desired climatic factors that can trigger and influence employees’ readiness for effective improvements. A synergy of both planned and unplanned improvement has been argued to solve complex problems (Burnes, 2004; Bryson et al., 2006), which has received little attention in readiness research.

2.4.1.1 Planned improvement

Planned improvement or episodic change refers to an intended improvement intervention which is characterised as deliberate, purposeful and systematic (Tenkasi & Chesmore, 2003). It reflects the teleological approach (Van de Ven & Poole, 1995), which is driven by a purpose or goal, and improvement agents play a role in planning and implementing through a step-by-step process (Kezar, 2001). The planned approach was initiated by Lewin (1946), in that he emphasised the creation of employee motivation and readiness for change to reduce resistance in the early stages of unfreezing. His three-step model involves
‘unfreezing’ the present level, ‘moving’ to the new level and ‘refreezing’ this new level. Lewin’s first step of ‘unfreezing’ refers to finding the means for employees to let go of an old pattern of behaviour (unlearnt) that was counterproductive in some way. Before new behaviour or new ways is successfully adopted, the equilibrium needs to be destabilised (unfrozen) and may involve stirring up old emotions. The second step of ‘moving’ to a new state involves the process of change by adopting a learning approach that enables individuals and groups to move to a more acceptable set of behaviour influenced by their thoughts, feelings and behaviour that is more productive. The third step of ‘refreezing’ refers to the establishment of a new state or change of behaviour that is now becoming the ‘standard operating procedure’. The process of ‘refreezing’ ensures that employees’ behaviour does not slide or fall back into their old ways of behaviour or work pattern (Burnes, 2004). In organisational terms, ‘refreezing’ requires changes to organisational culture, norms, policies and practices (Cummings and Worley, 2001).

This model has been criticised for its impracticability, thus has been further developed by other researchers to include a multidimensional matrix between human and technical systems (Bamford & Forrester, 2003; Broom & Seashore, 2009). It also emphasises the key roles of improvement agents and decision-making from the top management (a top-down management approach).

Planned improvement has been criticised over the following. Firstly, it is more applicable to small-scale and incremental change rather than rapid, transformational change (Senior, 2002; Burnes, 2004). Secondly, it assumes that organisations operate under constant conditions and that they can be moved from one stable state to another in a pre-planned manner (Bamford & Forrester, 2003). Thirdly, it is argued by several authors that the approach is no longer compatible to cope with the complexity of the challenges that organisations face today (Wilson, 1992; Burnes, 2004; Orlikowski & Hoffman, 1997). The planned approach reflects a more open-ended and continuous process rather than a set of pre-identified discrete and self-contained events (Burnes, 1996, 2004). Critics have also argued that a planned approach does not take into account stakeholders or the frontline’s willingness for and agreement to change (Bamford & Forrester, 2003). It also ignores
organisational politics and conflict and assumes that these can easily be identified and resolved (Burnes, 1996, 2004).

2.4.1.2 Unplanned improvement

Unplanned improvement is described as major unanticipated events or crises and adds a factor of adaptive feedback to the planned change (Knowles & Saxberg, 1988). Eby et al. (2000) refer to chaos and complexity theories that can be applied in unplanned conditions and the need to foster the right level of readiness to survive in such conditions. Todnem (2005) suggests that due to the complexity and uncertainty of the environment that emerges in unplanned improvement, improvement readiness and facilitating for that improvement is more of a concern than providing specific pre-planned steps for each initiative. According to complexity theory, organisations have dynamic and self-organising contexts for continuous change (Brown & Eisenhardt, 1998). In practice, for the public sector, the sequence or cycle of both planned and unplanned improvement may overlap (Burke, 2002). For this reason, a synergy of both planned and unplanned improvement is considered for this study.

2.4.2 Level of readiness approach

As communication cascades down the multilevel hierarchical structure of the organisation, it has been argued that the understanding and implication of the change is perceived differently at each level (Caldwell et al., 2004; Rafferty et al., 2013). Recent studies have shown an interest in a more holistic and integrated exploration by using an integrated multilevel approach with the micro-domain’s focus on individuals and groups and the macro-domain’s focus on the organisation (Bonn, 2005; Erez & Gati, 2004; Bouckenooghe, 2008; Rafferty et al., 2013). The underdeveloped research for a more holistic and comprehensive approach that aligns multilevel and multidimensional readiness with the components of the organisational climate for improvement led to the focus of this study.
2.4.2.1 A multilevel approach: individual, group and organisational readiness

Several researchers have acknowledged that improvement efforts involve multilevel processes leading to a multilevel perspective of employee readiness (Seligman & Csikszentmihalyi, 2000; Caldwell et al., 2004; Bouckenooghe, 2008; Weiner, 2009). The dynamic multilevel manifestation of culture through influence in an organisation can be observed from a top-down and bottom-up approach process (Klein & Kozlowski, 2000). The development of the employee readiness concept both theoretically and empirically conducted at the individual level has often been used to describe organisational readiness (Bouckenooghe, 2010). Rafferty et al. (2013) argue that the processes and climatic factors that contribute to the emergence of the multilevel readiness of employees may differ at the individual, group and organisational levels. Thus, to neglect a multilevel dimension relating to the individual, group and organisational aspects of the culture in an organisation would lead to a misconception about readiness. It is argued that organisational readiness starts with people’s readiness, which transforms into group readiness, which in turn contributes to organisational readiness, as shown in Figure 2.1.

Figure 2.1 Linking individual, group and organisational readiness.
Individual readiness is defined as the individual’s beliefs, attitudes and intentions regarding the extent to which changes or improvements are needed and the organisation’s capacity to successfully undertake those changes (Armenakis et al., 1993). According to Armenakis and Harris (2002), there are five beliefs that affect individual readiness: discrepancy, appropriateness, efficacy, principal support and self-valence. Discrepancy refers to the belief that change is needed; appropriateness refers to the appropriateness of the proposed change; efficacy refers to the individual’s perceived capability to implement a change initiative (Armenakis et al., 2007) and is change-related (Oreg et al., 2011); principal support refers to the individual’s belief that his or her organisation (i.e. superiors and peers) will provide support for change in the form of resources and information; and self-valence refers to an individual’s evaluation of the benefits of change for his or her role. If the individual does not believe that the change or improvement has benefits, then the level of readiness to support it is low.

Whelan-Barry et al. (2003) argued that the organisational level of improvement processes inherently involves group and individual processes. Several researchers argue that as a result of the social interaction that takes place among workgroups, individuals in those groups tend to be influenced, converging into a consensual and shared perception of individual and workgroup multidimensional readiness (Klein & Kozlowski, 2000; George & Jones, 2001; Oreg, 2003). For example, in the case of improvement readiness, there is a shift from an individual multidimensional perspective (i.e. I believe, I feel and I intend to act) to a shared workgroup multidimensional perspective (i.e. we believe, we feel and we intend to act). Organisational readiness or attitude is the collective consciousness across an organisation (Berneth, 2004). Organisational readiness refers to the extent to which organisational members are psychologically and behaviourally prepared to implement organisational improvement. Higher organisational readiness means that higher organisational members believe and support the improvement effort. It increases resilience in times of uncertainty or obstacles, thus contributing to the success of improvement efforts (Armenakis et al., 1993; Kotter, 1996). Rafferty et al. (2013) suggest that the workgroup and organisational readiness attitude may emerge from a shared cognitive and affective
effect of individuals as a result of the social interactive process that manifests in the higher collective readiness level for improvement.

Public service organisations are known to be complex due to the high level of interaction and connectivity activity within the hierarchical structure and culture. Under such conditions, this study argues that the alignment of individual, group and organisational readiness can be achieved through a multidimensional shared perception of the desired organisational climatic factors for effective improvement. There is still limited research, particularly for public service organisations, into developing multilevel theoretical frameworks for organisational researchers (Klein & Kozlowski, 2000; Bouckenooghe, 2008; Rafferty et al., 2013). This research covers a multilevel and multidimensional comprehensive study by filling the voids in the limited perspective of readiness research.

2.4.2.2 Multidimensional readiness: affective, cognitive and intentional

Researchers have argued that improvement or change efforts are unlikely to succeed when the multilevel aspect of employee readiness linking to the cognitive-affective nature of organisational change or improvement is not taken into consideration (Kavangh & Ashkanasy, 2006; Rafferty et al., 2013). Further understanding has been gained of the linkage between attitude and human behaviour towards improvement as an extension to the theory of planned behaviour proposed by Ajzen (1984). Researchers have argued that human attitude is multidimensional involving cognitive, emotional and intentional aspects (Piderit, 2000; Holt et al., 2007; Weiner, 2009; Rafferty et al., 2013). According to some researchers (Pideret, 2000; Oreg, 2006), cognitive readiness enhances the preparedness of staff to cope with chaos through improvement programmes, whether planned or unplanned. Emotional readiness for improvement is the affective reaction to improvement. Intentional readiness for improvement is the extent to which employees are prepared to put their energy into the improvement process.

Developments in the literature highlight the distinction between the three dimensions (Ajzen, 1984; Eagly & Chaiken, 1993), their potential interaction (Olson & Zanna, 1993; Piderit, 2000) and their relation to the improvement context being implemented (Pettigrew et al., 2001; Van de Ven & Poole, 2002). Further empirical research is still needed to
understand the causal relationship between the three dimensions in relation to the different variables that are influenced by the environment, for instance in the improvement context and the improvement process (Bouckenooghe, 2008). For public service organisations to perform effectively and cope with the challenges of chaos and complexity through continuous improvement, employees need to develop cognitive readiness by being flexible and creative. It has been argued that highly negative cognitive readiness of employees will not sustain improvement (Armenakis et al., 1993; Cunningham et al., 2002). Viewing from a multidimensional perspective may help to understand the complexity of employees’ readiness for improvement in a more comprehensive manner.

2.4.2.3 Person-centred versus organisation–centred

There is a general belief that many organisational improvements have failed in the past because the employees’ readiness for improvement has not been considered (Beer & Nohria, 2000; Clegg & Walsh, 2004). Many research studies in organisational improvement have put more focus on the organisational aspects than the person-centred aspects (Quinn et al., 1994; Weiner, 2009). Armenakis et al. (1993) believe that there must be a balance between the individual’s perception and the organisation’s capacity. Bray (1994) suggests that more focus should be given to the individual or person-centred level of positive readiness in order for effective and successful improvement to take place. A major concern in the literature is the emphasis on research into organisational readiness rather than person-centred readiness (Lewin, 1947, 1951; Weiner, 2009). Holt et al. (2009), however, emphasise the need to consider both perspectives to reach a comprehensive evaluation of readiness. As Schneider et al. (1996) argue, if people do not improve, there is no organisational improvement. Therefore, it comes back to the root of organisational improvement, i.e. the human factor (Kelly, 2005). Thus, this study focuses more on the person-centred perspective.

2.4.3 Opposite poles of readiness attitude

As compared to the research review of negative attitude (Maslow, 1954; Myers, 2000), positive attitude is still considered to be underdeveloped in terms of understanding it in a more comprehensive manner. A positive attitude helps individuals and organisations to
identify their strengths and use them to increase and sustain their respective levels of well-being (Luthans, 2002a, 2002b; Cameron et al., 2003). According to some researchers (Luthans & Youssef, 2007; Turner et al., 2002), positive attitude attracts the positive climate needed to survive and adapt positively to the challenges of life. The effect of a positive climate reduces the negative impact created by work stress, lack of management support, high expectations and unrealistic goals. However, there is still limited knowledge on how positive attitude works between the multilevel hierarchical structures of organisations. There is a need for more focus on exploring the positive side of readiness research in the field of management to gain a full understanding of how to develop an appropriate approach to achieving better work performance (Luthans & Youssef, 2007; Turner et al., 2002). Thus, this research examines positive readiness for improvement.

Negative readiness research is more dominant in most studies, reflecting the non-positivist perspective of human behaviour (Rand & Snyder, 2003; Walsh et al., 2003; Luthans, 2002a; Bouckenooghe, 2008; Hendrickson & Gray 2012). This negative feeling of resistance is brought about by a lack of management support, inconsistent actions by key managers and top management, work overload causing stress and job fatigue and unrealistic expectations, among other reasons (Covin & Kilmann, 1990). When the motive for improvement is poorly communicated and cascaded down the hierarchical level, it creates a fertile ground for rumours, anxiety, negative attitudes and resistance (Klein & Stuart, 1994; Del Val & Fuentes, 2003; Hendrickson & Gray, 2012).

2.5 ORGANISATIONAL CLIMATIC FACTORS

Organisational climate has been defined as the characteristics of organisations that are reflected in employees’ attitudes to and perception of the policies, practices and conditions that exist in the work environment (Schneider & Snyder, 1975). According to Schwartz and Davis (1981), organisational climate can be considered as a means of measuring employees’ expectations of their desired working environment in an organisation. Climate is also understood as a manifestation of culture (Schein, 1985). Diagnosing the organisational climate where improvements are intended may provide information about
whether and how organisational culture accommodates change or improvements (Reichers & Schneider, 1990).

Organisational climate for improvement in this context refers to the perception of the nature of improvement, the conditions under which improvement occurs (i.e. context), the process of implementation and employees’ readiness attitude to the improvement (Walker et al., 2007; Bouckenooghe, 2008; Weiner, 2009). Current developments in research argue for the positive linkages and effects of organisational climate factors on employee readiness (Madsen et al., 2006; Bouckenooghe, 2008; Weiner, 2009). Studies that cover the combined effect of antecedent climatic factors with a multidimensional, multilevel approach are still limited (Holt et al., 2007; Bouckenooghe & Devos, 2008; Weiner, 2009; Schurer et al., 2010; Rafferty et al., 2013). There is also limited study of multi-cultures (Pettigrew et al., 2001; Shah & Iran, 2010), as the variables under each facet may vary across different political cultures.

2.5.1 Improvement context factors
The improvement context refers to the general conditions that describe the organisation in which improvement is implemented (Holt et al., 2007). Researchers have discovered broader contextual conditions that affect employees’ readiness to support improvement (Bouckenooghe, 2008; Gilley et al., 2009; Devos et al., 2007; Shah & Iran, 2010). Selected climatic factors extracted from the readiness literature that comply with employees’ perception in this study are categorised under the improvement context. The climatic factors believed to potentially influence positive readiness for improvement include history of past improvement achievements, trust in top management, self-efficacy and personal valence and group efficacy, trust in peers, job satisfaction, job demand, job knowledge and skills, and manager/employee relationships.

2.5.1.1 History of past improvement achievements
Past experience of improvement efforts, particularly if it involves repeated history of hot and cold actions leading to failure of improvement efforts, has a tendency to shape an individual’s negative perception and cynicism (Dean et al., 1998; Johnson & O’Leary-
Kelly, 2003). A history of hot and cold actions is referred to employees’ experience in relation to situations where top management demonstrates a track record of making promises that the organisation cannot keep or unable to make a decisive decision ending in confusion (Fleming, 2005). The influential impact of repeated history of failed attempts shaped by negative experience in the work context increases the level of cynicism. The level of cynicism involves feeling of frustration, disillusionment and negative feelings towards an organisation (Dean et al., 1998; Johnson & O’Leary-Kelly, 2003). According to some researchers (Reicher et al., 1997; Waneous et al., 2000), history of past improvement achievements can undermine future improvement initiatives. The higher the level of cynicism influenced by past experience, the more improvement agents or top management need to confront and discuss previous failures before proceeding to implement future improvement. According to Ingersoll et al. (2000), additional research is needed to clarify how an organisation’s history and culture of improvement contributes to the employees’ willingness to commit to the goals of the organisation. A positive experience or past history of improvement will stimulate employee readiness and a negative experience will inhibit readiness (Bernerth, 2004). In the case of public service organisations, it is believed that past experience of improvement initiatives influences the perception and readiness of employees for future improvement initiatives (Pare et al., 2011).

2.5.1.2 Trust in top management

In the management literature, trust is described as a concept that represents the level of confidence and belief that employees have in their leader, particularly by being honest, sincere and unbiased when taking their positions into account (Korsgaard et al., 1995; Folger & Konovsky, 1998). Some researchers (Eby et al., 1995; Rousseau & Tijoriwala, 1999; Bouckenooghe, 2008) argue that the level of trust in top management influences employee readiness. Developing trust in top management is important in determining employees’ openness to change and improvement and critical in implementing strategic decisions. The principle of the role of trust in management as a determinant of people’s readiness for improvement can be explained by the theory of social accounts (Sitkin & Bies, 1993). Social account is defined as the explanation that leaders or managers provide their followers for their unanticipated actions or decisions. These explanations may take
the form of ‘excuses’ (for example, it wasn’t my fault) and ‘justification’. Justification appeals to higher order values so that the suspect behaviour no longer seems against the norm; for example, layoff policies are acceptable because they are based on seniority (Scott & Lyman, 1968; Sitkin & Bies, 1993). Social account is also useful in dealing with organisational justice or fairness. There is a general belief that employees are only willing to engage in desired behaviours (i.e. readiness for change) if they perceive that their leader is able to demonstrate care, consideration and fairness as a form of social exchange (Konovsky & Pugh, 1994). Thus, greater trust in management (against little trust) should be accompanied by greater readiness for change (Berthon et al., 2008; Erturk 2008).

2.5.1.3 Self-efficacy and personal valence

In general, self-efficacy refers to the confidence or belief in one’s ability to make the improvement. Self-efficacy is a critical factor in promoting readiness for organisational improvement (Bandura, 1986, 1997; Cunningham et al., 2002; Rafferty & Simons, 2006). Lack of self-efficacy may lead to avoidance, absenteeism and a non-supportive attitude to any improvement initiatives. The feeling of confidence may be enhanced through clear roles and responsibility, promoting active participation, placing the right people in the right place, a greater degree of autonomy and a flow of information and knowledge that is well communicated among the employees (Devos et al., 2007; Rafferty & Simons, 2006). There is general agreement in the management literature that readiness for organisational improvement is greatly influenced by employees’ self-efficacy through their belief that they are able to cope with the improvement (Cunningham et al., 2002; Rafferty & Simons, 2006; Devos et al., 2007).

Personal valence is also associated with motivation (Vroom, 1964) and is also strongly related to creating employees’ readiness for improvement in terms of the perception of the benefits to the recipients. Personal valence provides greater clarity among employees for the improvement issues, especially improvement agents (Siddiqui, 2011). Personal valence also refers to the extent to which an employee feels that he or she will benefit from the implementation of the improvement initiative either explicitly (promotion, money, time off) or implicitly (rewards, satisfaction), depending on the individual’s values (Self &
Schraeder, 2009; Kvaliauskaitė & Jucevičius, 2010). If the outcome of improvements as perceived by the employees is negative in terms of bringing in benefits for their self-interest, then the attempted improvement is likely to receive little or no support (Armenakis & Harris, 2002). Thus, self-efficacy and personal valence are believed to be important climatic factors that drive the positive readiness of employees to participate in and support improvement.

### 2.5.1.4 Group efficacy

Group efficacy is defined as the group members’ confidence in performing a specific task (Lindsley et al., 1995; Gibson, 1999). Organisations are increasingly using work teams for many reasons, including providing better service in accordance with the customers’ needs, to increase innovation and to improve productivity (Sunstrom et al., 1990; Eby et al., 2000). Several researchers have claimed that group efficacy has a tendency to increase the effectiveness of the workgroup towards the group’s mission and commitment, group cohesiveness and the group’s resilience during difficult times (Cohen & Bailey, 1997; Bandura, 1997; Eby et al., 2000). Gully et al. (2002) argue that team efficacy is positively related to performance. Therefore, it is believed that the development of group efficacy in workgroups is an important climatic factor that drives positive workgroup readiness to participate in and support improvement.

### 2.5.1.5 Trust in peers

Nyhan (2000) describes trust as the level of confidence of an individual in another person’s competence and his or her willingness to act in a fair, ethical and predictable manner. Trust in peers refers to the level of expectation of employees regarding the behaviour and reliability of their workgroup peers to support improvement processes. Thus, researchers have shown that trust in peers increases employees’ readiness to support improvement (Chattopahyay & George, 2001; Madsen et al., 2005; Rafferty & Simons, 2006).
2.5.1.6 Manager/employee relationship, job demand, job knowledge and skills

Researchers have argued that the employees’ relationship with their managers, having a high job demand and having jobs that empower employees with knowledge and skills to manage improvement increases employees’ readiness to support improvement (Barger & Kirby, 1995, cited in Rowden, 2001; Cunningham et al., 2002; Miller et al., 2006). The manager/employee relationship helps in the understanding of the employee’s attitude and behaviour, feelings and thoughts with regards to their job in the organisation. A good relationship also helps knowledge to be understood and transformed at multi-levels, i.e. at the individual, group and organisation level (Peroune, 2007). Job knowledge and skills increase employees’ readiness and ability to participate meaningfully in planning and implementing the improvement (Rowden, 2001). Job demand refers to those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (i.e. cognitive or emotional) effort and are therefore associated with certain psychological costs (Schaufeli & Bakker, 2004). It is argued that high job demand that increases learning opportunities and contributes to desirable stress increases employees’ confidence and readiness for improvement (Karasek, 1979).

2.5.1.7 Job satisfaction

Job satisfaction is defined as the emotional state in which employees perceive their work environment (Nystedt et al., 1999). Job satisfaction indicates how the employee feels and what they believe about their job and a predictor of work behaviour such as organisational readiness, organisational citizenship and absenteeism. It also influences the level of productivity on the job (Devos et al., 2002; Walsh & Deery, 2006). The management literature highlights many variables that link to job satisfaction, such as the job itself, payment, promotion, working conditions, benefits of the work, fellow workers, personal values and the employee-employer relationship (Locke, 1976; Rhoades & Eisenberg, 2002). Perceived work stress is also found to be a factor that affects job satisfaction (Norbeck, 1985). Miller and Monge (1986) suggest that employee perceptions of a participative climate are effective predictors of job satisfaction and performance.
Dissatisfaction increases the possibility of employees’ negative acts in terms of their quantity and quality of input (Ichniowski, 1986). Research has also shown that employees who believe management is unsupportive of quality and customer service are likely to be less satisfied with their organisation (Walsh & Deery, 2006). Probst (2003) found that the effects of restructuring result in negative impacts on the recipients of improvement. Such negative impacts come in the form of lower commitment, lower job satisfaction, low levels of job security and increased employee turnover. Thus, it is believed that job satisfaction, as a variable of the organisational climate, is positively linked to the readiness of employees to participate and support improvement.

2.5.2 Improvement process factors
The improvement process is the way in which improvement efforts are implemented and is believed to affect the reaction of employees. Several models have been developed to describe the different phases or processes of improvement implementation (Armenakis et al., 1999; Galphin, 1996; Armenakis & Harris, 2002). The following process factors are believed to contribute as climatic factors to drive positive employee readiness for improvement.

2.5.2.1 Participation
Researchers have identified the importance of a participatory approach among improvement recipients (i.e. individuals, groups and top management) rather than expert-driven approaches to the success of an improvement initiative (Berg, 1997; Lines, 2004; Bouckenooghe & Devos, 2007). The success of improvement initiatives depends on how well they are implemented within a holistic and integrated concept (Cao & McHugh, 2005). Improvement success takes into account the integration of the technical (objective dimension) and human (subjective dimension) aspect of the organisation through participation (Zink et al., 2008). Researchers have argued that the integrated flow of knowledge and information within all levels in the organisation through participation enhances the understanding, receptivity and commitment of all involved (Wilson & Haines, 1997; Kutilainen et al., 1998; Armenakis & Harris, 2002). Thus, it is expected that employees who perceive their work environment as highly participative are more ready
and likely to commit and anticipate being involved in decision-making during the improvement efforts (Schneider et al., 1996; Wanberg & Banas, 2000; Devos et al., 2007). Thus, participation has a tendency to increase employees’ readiness to support organisational improvement (Wanberg & Banas, 2000; Armenakis & Haris, 2002; Manville & Ober, 2003).

2.5.2.2 Communication
In the research efforts to understand readiness, communication has been identified as a core component in creating employee readiness to support and succeed in organisational improvement (Armenakis & Harris, 2002; Charvatova, 2006; Bouckenooghe, 2008). Effective communication is described by Fiedler (2001) as intentional and deliberate and is characterised by openness, directness, respect, responsibility and aim. One of the major problems that lead to failed improvement efforts is the lack of attention to communicating and cascading the idea down the hierarchical system of the organisation. Some researchers argue that the perception and degree of understanding among employees may vary between each level. This vacuum of information leads to informal communication (i.e. guessing and gossip) as an emotional release for the uncertainty and feeling of fear and anxiety, thus creating unreadiness in the form of negativity, resistance and isolation (Charvatova, 2006; Madsen, 2008). Strategising the employees’ voice through communication before or during organisational improvement positively influences employees’ attitudes to improvement (Eby et al., 2000; Armenakis & Harris, 2002). Thus, it is believed that communication is an important climatic factor for employee readiness, particularly in the manner in which it is cascaded through the multilevel hierarchy system of an organisation.

2.5.2.3 Top management support
Top management support for improvement is crucial in leading and guiding the organisation through the process of improvement, thus creating and building employees’ readiness to support improvement (Susanto, 2008). Top management support refers to legislative, financial, technical and administrative support and is believed to be an antecedent to driving employees’ readiness for improvement (Eby et al., 2000). Legislative and technical support refers to organisational policies and practices, procedures and system
support that are flexible and available to support improvement (Schneider et al., 1992; Eby et al., 2000). On the other hand, personal and administrative support may take the form of supportive leaders, a level of management trust, management that prioritises fairness and justice, supporting career development, promotion, rewards and incentives (Eby et al., 2000; Susanto, 2008). A conducive organisation climate in determining the organisational readiness for improvement is the way it operationalises routine behaviours and the actions that are expected, supported and rewarded (Schneider & Rentsch, 1988; McNabb & Sepic, 1995). The alignment of an organisation’s climate and culture is an important factor that contributes to the readiness for and acceptance of improvement. Developing the attributes of good leadership skills and capabilities to create and lead the right management support and influence for the employees through continuous support and commitment is also important (Leiter & Harvie, 1998; Kavaliauskaite & Jucevicius, 2010). Thus, top management support is believed to be an important climatic antecedent to drive readiness for improvement.

2.5.2.4  Management’s opportunity to lead continuous improvement, internal customer focus and team processes and a clear understanding of quality and customer requirements

Management’s opportunity to lead continuous improvement is the capacity of the organisation to provide managers with support for their involvement in continuous improvement, which is necessary to increase their readiness. (Rowden, 2001; Rieley & Clarkson, 2001; Burns, 2004). Internal customer focus and team processes are necessary to enhance employee readiness, as it assures their engagement and alignment of involvement with their immediate manager and peers for the success of organisational improvement (Dalu & Deshmukh, 2002; Dana, 2004). It refers to improvement efforts that focus on the interactive activities of the employees, individual units and departments of an organisation and their task environment to meet the needs of external customers (Farner et al., 2001; Zemke, 2002). Developing a climate of understanding quality and customer requirements based on employees’ perception is believed to influence employee readiness, as it increases employees’ empowerment to respond accordingly to customers’ concerns (Dalu & Deshmukh, 2002; Dana, 2008).
2.5.2.5 Clear task roles and responsibilities and clear expectations and direction from senior managers

Clear task roles and responsibilities are believed to enhance employees’ readiness to support improvement. It provides clarity on what and how their job and responsibility fit in the bigger picture of the improvement strategy and the significance of their responsibility to the improvement (Watkins & Leigh, 2010). Studies have shown the positive relationship between having clear expectations and direction from senior managers with readiness, as it enhances employees’ understanding of the direction and expectations of the improvement led by their managers. The effectiveness of leaders to clarify the need for improvement and transform it to their expectations through aims, measured objectives and targets helps focus employees’ minds on the strategic objectives, thus enhancing their readiness to support improvements (Oakland & Tanner, 2007).

2.5.2.6 Logistic and system support, flexible policies and procedures and perceived organisational support

Studies have shown that climatic factors such as having logistic and system support, flexible policies and procedures and perceived organisational support increases employees’ readiness to support improvement. Logistic and system support allows employees’ behaviour to align with improvement, and flexibility in policies and procedures allows rapid change or improvisation to take place, thus emphasising the employees’ belief in the organisation’s capability to facilitate, thus increasing their readiness (Eby et al., 2000; Rafferty & Simons, 2006). Perceived organisational support relates to the extent to which employees’ perceive that their organisation values their contribution and cares about their well-being, thus increasing their readiness to support improvement (Eby et al., 2000).

2.5.2.7 Conduciveness to unlearn (learning culture)

The chaotic and complex nature of a public service organisation in bringing about improvements can result in chaotic changes (Gleick, 1987) and a dramatic experience for the individual and organisation (Abrahamson, 2000). Anderson (1996) argues that in order to adapt to the nature of improvement, a continuous culture of learning is most likely to
succeed and be sustained. Becker (2003) identifies three issues that need to be considered in fostering and developing the readiness of a learning culture: clearly defined roles; individual ability and employees’ readiness to learn and unlearn when implementing; and the fact that regionally based organisations present additional challenges in implementing improvement and expect individual learning, development and unlearning. According to Heath et al. (1993), individuals have a tendency to maintain their status quo and carry on with their old routine ways, thus obstructing them to unlearn obsolete knowledge and accommodate the transfer of new knowledge.

Markoczy (1994) argues that resistance to learn and unlearn is likely to come from managers and middle managers who may fear losing their authority, control and confidence from well- tried practice and limited capacity to cope with the improvement. This may result from their unwillingness and belief to embrace improvement. This is supported and emphasised by Clarke-Okah and Daniel (2010) from the Commonwealth of Learning in collaboration with UNESCO on the importance of senior management’s commitment and readiness to lead and be part of the process and allocate the time and people to implement the improvement. Thus, it is believed that the conduciveness of the organisational environment for improvement recipients to unlearn their old ways and learn new ways is an important climatic factor to drive positive readiness for improvement.

2.6 RESEARCH GAPS

Following the findings from the above literature, the concept of positive readiness for improvement has not received as much attention as the negative aspect of readiness described in the form of resistance to change or improvement (Turner et al., 2002; Luthans & Youssef, 2007). Current developments in understanding the multifaceted concept of readiness still lack comprehensiveness, both empirically and theoretically. The key areas of the research gaps identified from the literature lead to the area of focus of this study.

Research gap 1: The characteristics of public service organisations

There is a need to understand public service organisations as being complex and adaptive to strategise an approach where employee readiness can be fostered effectively from within
the organisation to support improvements (Hayes, 2003; Rhodes et al., 2012). No study has been conducted comprehensively using the Brunei absolute monarch-governed organisational context. There is limited research that takes on complexity theory in understanding how employee readiness can be triggered and influenced within a complex and adaptive organisation.

**Research gap 2: Organisational climate**

In relation to the improvement content or type of improvement, developments in research are limited to one type of improvement, predominantly planned improvement, thus resulting in specific conclusions (Bouckenooghe & Devos, 2008; Schurer et al., 2010). There is a need for further research that focuses on a synergy of both planned and unplanned improvement (Bryson et al., 2006) to solve complex problems.

In relation to the improvement context and process, development in research has been achieved with few climatic variables derived from different studied and political contexts. There is a need for a wider selection of climatic factors to be used under the improvement context and process (Bouckenooghe, 2008). The perspective of employee readiness in multiple public domains and different organisational contexts is still underrepresented (Fatima, 2002; Shah & Iran, 2010; Rafferty et al., 2013). Few recent studies have taken a comprehensive and combined pragmatic approach, highlighting the varying outcomes (Rafferty & Simons, 2006; Essain et al., 2010). The result would provide a wider coverage of the possibilities for employee readiness to be promoted for effective improvement.

**Research gap 3: Readiness as multidimensional and multilevel**

Thus far, development in readiness research has been achieved on a single level of analysis of multilevel and multidimensional readiness (Bouckenooghe, 2008; Weiner, 2009; Rafferty et al., 2013). Further research to understand the complexity of employee readiness within a complex and adaptive organisation is required with a more holistic and pragmatic approach.
2.7 RESEARCH QUESTION AND HYPOTHESIS

By applying complexity theory, a higher level of employee readiness may evolve from the amplification of the initial triggers through the influence of feedback, readaptation and self-organising processes (Kauffman, 1995; Morrison, 2002; Richardson, 2005). Thus, to be able to facilitate the necessary conditions to better manage employees’ behaviour for improvements to succeed, this study aims to answer the following research question:

**Research Question:** What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvement in Brunei’s public service organisations?

Within the conceptual framework of the study, it is hypothesised that identifying the climatic factors is a positive function of employees’ multidimensional readiness for effective improvement.

**Hypothesis:** The identified climatic factors have a positive relationship with employees’ multidimensional readiness for effective public service improvement.

The studied context is based on a synergy of planned and unplanned improvements and uses a wider range of climatic factors under the improvement context and process. Brunei’s absolute monarch-governed organisational context is used as a case study.

2.8 CHAPTER SUMMARY

The findings in Chapter 2 highlight the research gap in the field of readiness research. This chapter emphasises the need to take a holistic and pragmatic approach to the different perspectives conceptualising readiness. The application of complexity theory adds an additional perspective to understanding how to facilitate employee readiness in complex and adaptive organisations such as public service organisations. Chapter 3 discusses the conceptual framework.
CHAPTER 3-CONCEPTUAL FRAMEWORK

3.0 CHAPTER OVERVIEW
The previous chapter provided a background of the literature linking the characteristics of complex and adaptive organisations, the multifaceted aspect of employee readiness and the different components of the readiness climate for effective improvements. From the literature, the research gaps, research question and hypothesis were determined for the study. Linking to the research gaps, a conceptual framework is drawn from the literature findings, highlighting the perspective of this thesis. The chapter structure is outlined in Figure 3.0.

Figure 3.0 Structure of Chapter 3.
3.1 POSITIONING THE PERSPECTIVE OF THIS THESIS

By positioning the context and perspective of this study close to reality, the results should bring us closer to understanding the complexity of employees’ readiness for effective improvements. The framework of the study takes a holistic approach by conceptualising several components linked to the concept of readiness. The study responds to recent calls for a more holistic approach under different organisational contexts to shed new light on the complexity of employees’ readiness for effective improvements (Valdes et al., 2011; Rhodes et al., 2012). To the researcher’s knowledge, no research of this nature has been conducted in the context of Brunei Darussalam’s public service organisations. Regarding the research gaps, the following perspectives are considered.

3.1.1 Public service organisations as complex and adaptive

According to researchers, chaos and complexity theory describes a system’s sensitivity to the initial conditions and explains how order emerges from lower levels of behavioural complexity to higher levels of complexity through the influence of feedback, readaptation and self-organising (Kauffman, 1995; Stacey, 2000; Morrison, 2002; Richardson, 2005). The study uses chaos and complexity theory to argue that in complex and adaptive organisations such as public service organisations, employee readiness can be stimulated from the initial minimum level of readiness and influence higher levels of readiness for effective improvements. The essential and influential climatic factors can only be recognised during moments of chaos when conditions are most conducive based on the employees’ perspective.

3.1.2 Improvement content: a synergy of planned and unplanned improvement

The improvement content in the organisational climate for improvement refers to the type of improvement that is experienced by the employees. Viewing from a synergy of both planned and unplanned improvement has been argued to solve complex problems (Burnes, 2004; Bryson et al., 2006), but has received little attention in readiness research. Furthermore, planned improvement does not always come out as planned (Burke, 2002). It is argued that by identifying the common desired climatic factors within a subset of
planned and unplanned improvements, employee readiness can be sustained to survive the constant flux of instability of complex problems (see Figure 3.1).

![Diagram](image-url)

**Figure 3.1** The common link between climatic factors under planned and unplanned improvement.

### 3.1.3 Improvement context and process: a wider range of climatic factors used

The improvement context refers to the general conditions under which the improvement occurs, and improvement process refers to the process used to deal with the improvement. There is a need for a wider selection of climatic factors to be used in the improvement context and process (Bouckenooghe, 2008). The perspective of employee readiness in multiple public domains and different organisational contexts is still underrepresented (Fatima, 2002; Shah & Iran, 2010; Rafferty et al., 2013).

A wider selection of climatic factors extracted from the literature is tested from the employees’ perspective to identify the dominant desired climatic factors. We argue that the monarch-governed context will generate a specific desired climate and may differ from previous research findings.
3.1.3.1 Improvement context (independent variables)

The selected climatic factors extracted from the literature review under the improvement context, including individual attributes, represent the independent variables. These climatic factors range from the history of past improvement achievements, trust in top management, self-efficacy and personal valence, group efficacy, trust in peers, the manager/employee relationship, job demand, job knowledge, and skills and job satisfaction. Further explanation of these climatic factors can be found in Chapter 2. Table 1.0 provides a description and justification for the range of selected climatic factors under the improvement context.

Table 1.0 Descriptions of climatic factors under the improvement context and employees’ attributes.

<table>
<thead>
<tr>
<th>Form of readiness</th>
<th>Climatic factor</th>
<th>Description</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement Context (Attributes of environment where initiative is implemented). Refers to the general conditions under which improvement occurs.</td>
<td>Trust in top management</td>
<td>The degree of confidence and employees have in their leaders, particularly in making strategic decision in terms of honesty, fairness, unbiases and sincerity. (Folger &amp; Konovsky, 1989; Korsgaard et al., 1995)</td>
<td>The level of trust by employees in the actions delivered by their top management influences the level of employees’ readiness and willingness to participate in improvement, particularly if they believe that the managers can demonstrate fairness, reliability, care and honesty as social exchange in their decision-making and actions for improvement. (Bouckenoghe, 2008)</td>
</tr>
<tr>
<td>History of past improvement achievements</td>
<td>Experiences and references from past events or past achievements in relation to improvement. (Dean et al., 1998; Johnson &amp; O’Leary-Kelly, 2003)</td>
<td>Past experiences and belief in past achievements or how the improvements were brought about may influence employees’ cynicism and shape employees’ attitudes to future improvements. This may influence the level of commitment to and support of the success of future improvement initiatives. (Dean et al., 1998; Waneous et al., 2000; Johnson &amp; O’Leary-Kelly, 2003)</td>
<td></td>
</tr>
</tbody>
</table>
| **Trust in peers** | Defined as the employees’ expectations regarding the behaviour of their workgroup peers, so those who they trust will reliably support processes that help them and oppose processes that will harm them.  
(Chattopahyay & George, 2001). | Studies have shown that climatic factor such as having trust in peers increases employees’ readiness to support improvement.  
(Eby et al., 2000; Rafferty & Simons, 2006) |
| **Manager/employee relationship** | The manager/employee relationship helps in the understanding of employees’ attitude and behaviour, feelings and thoughts with regards to their job in the organisation.  
(Gaertner & Noilen, 1989; Chang, 1999; Peroune, 2007) | Employee’s relationship with their managers, having a high job demand and having jobs that empower employees with knowledge and skills to manage improvement increases readiness to support improvements.  
(Hanpachen et al., 1998; Cunningham et al., 2002; Miller et al., 2006) |
| **Job knowledge and skills** | Refers to the required knowledge and skills that equip employees with the ability to participate meaningfully in planning and implementing the improvement.  
(Rowden, 2001) | |
| **Job demand** | Refers to those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (i.e. cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs.  
(Schaufeli & Bakker, 2004) | |
| **Job satisfaction** | Describes how content or satisfied an employee is with his/her job. This forms an attitude towards their job in the way they feel, believe and behave.  
(Devos et al., 2002) | Job satisfaction indicates how the employee feels about their job and a predictor of work behaviour such as organisational readiness, organisational citizenship and absenteeism. It also influences the level of productivity on the job.  
(Nystedt et al., 1999; Devos et al., 2002; Walsh & Deery, 2006) |
<table>
<thead>
<tr>
<th>Individual attributes (attributes of employees where initiative is implemented).</th>
<th>Self-efficacy</th>
<th>Personal valence</th>
<th>Workgroup attributes (attributes of workgroups where initiative is implemented).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refers to the tendency for employees to act differently towards improvement due to their differences in personality, character and professional background.</td>
<td>Self-efficacy is defined as people's judgment of their capabilities to organise and execute the courses of action required to attain designated types of performance. (Bandura, 1986).</td>
<td>Confidence that the improvement will benefit the employee personally. Also refers to the extent to which the employee feels that he or she will not benefit from the implementation of the improvement initiative either explicitly (promotion, money, time off) or implicitly (rewards, satisfaction) depending on individual values. (Self &amp; Schraeder, 2009).</td>
<td>Group efficacy is defined as the group members' collective estimate of the group’s ability to perform a specific task. It refers to the confidence of the group in making improvements. (Gibson, 1999).</td>
</tr>
<tr>
<td></td>
<td>The knowledge and capability to carry out the improvement through knowledge transfer and training skills enhances the self-confidence and self-capability to influence employee readiness in a positive manner to support and participate in improvement initiatives. Thus, higher self-efficacy relates to higher readiness for improvement. (Zimmerman et al., 1992; Cunningham et al., 2002; Berneth, 2004)</td>
<td>Personal valence has a positive effect on readiness for improvement. Especially for improvement agents, personal valence provides greater clarity among employees of the improvement issues. (Siddiqui, 2011)</td>
<td>A higher level of group efficacy leads to increased openness and readiness to learn from other group members, greater satisfaction to lead the group and increased opportunities to work independently within the group. (Cohen &amp; Bailey, 1997; Bandura, 1997; Eby et al., 2000)</td>
</tr>
</tbody>
</table>
3.1.3.2 Improvement process (independent variables)

The selected climatic factors in the improvement process represent the independent variables. These climatic factors range from job satisfaction, conduciveness to unlearn, communication, participation, the manager/employee relationship, top management support, job demand, job knowledge and skills, clear task roles and responsibilities, and clear expectations and direction from senior managers. Further explanation of these climatic factors can be found in Chapter 2. Table 2.0 provides the description and justification of the range of selected climatic factors in the improvement process.

Table 2.0 Descriptions of climatic factors in the improvement process.

<table>
<thead>
<tr>
<th>Form of readiness</th>
<th>Climatic factor</th>
<th>Description</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement Process</td>
<td>Communication</td>
<td>Communication is the two-way process of reaching an understanding in which participants not only exchange information but also create and share meaning. (Miller et al., 1994)</td>
<td>Communication is a vital mechanism for the effectiveness of improvement initiatives. Open communication, if cascaded down to all levels properly, will help to fill any gaps of isolation and widespread rumours due to a lack of communication and understanding with regards to the goal and purpose of the improvement that may influence negativity and resistance. (Armenakis &amp; Harris, 2002; Charvatova, 2006; Fiedler, 2007; Madsen, 2008)</td>
</tr>
<tr>
<td>Participation</td>
<td>Participation refers to the availability of information and involvement in decision-making in the change process. (Devos et al., 2002)</td>
<td>Participation, particularly in decision-making and involvement in the improvement process, helps to promote a sense of ownership and belonging that will influence employees to support improvements in a positive way. (Noro &amp; Imada, 1991; Schneider et al., 1996; Kutilainen et al., 1998)</td>
<td></td>
</tr>
<tr>
<td>Improvement Process</td>
<td>Conduciveness to unlearn</td>
<td>Clear task roles and responsibilities</td>
<td>Clear expectations and direction from senior managers</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------</td>
<td>---------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>(Steps taken to implement the initiative, i.e. management support). Refers to the process used to deal with the improvement.</td>
<td>Unlearning is the process through which learners discard knowledge and old routines and make room for new responses (Hedberg, 1981). A learning organisation is one that engages everyone in identifying and solving problems, enabling the organisation to continuously experiment, change and improve, thus increasing its capacity to grow, learn and achieve its purpose. (Daft &amp; Marcic, 1998)</td>
<td>Clear task roles and responsibilities refers to the interdependencies between authority, responsibility and tasks in order to deliver and achieve the goals of the role, team goals and align with individual goals. Having the right capability, skills, experience and ambition is necessary to fulfil the role. (Tang &amp; Wenzlik, 2008)</td>
<td>The effectiveness of leaders and managers to communicate clear direction and expectations to lead their employees. (Carr et al., 1996)</td>
</tr>
<tr>
<td></td>
<td>A learning organisation promotes continual improvement, development, improvisation and adaptation to their external environment through their learning capabilities. A conducive environment that promotes unlearning old ways to adopt new behaviour to match the improvement influences a positive attitude and self-efficacy, thus self-readiness to support improvements. (Anderson, 1996; Becker, 2003)</td>
<td>Having clear task roles and responsibilities is believed to enhance employees’ readiness to support improvement, as it provides clarity on what and how their job and responsibilities fit in the bigger picture of the improvement strategy and the significance of their responsibility to the improvement. (Watkins &amp; Leigh, 2010)</td>
<td>Studies have shown the positive relationship between clear expectations and direction from senior managers with readiness, as it enhances employees’ understanding of the direction and expectations of the improvement led by their managers. Only when the leaders are able to clarify and direct the awareness and need for improvement and transform it into their expectations through values, aims, measured objectives and targets can priorities start to emerge and focus people’s minds on the strategic objectives, thus enhancing their readiness to support improvements. (Oakland &amp; Tanner, 2007)</td>
</tr>
</tbody>
</table>
**improvement**

Involvement in continuous improvement, which is necessary to enhance their readiness. (Rowden, 2001)

Organisation. Studies have shown the positive impact on readiness. (Rieley & Clarkson, 2001; Rowden, 2001; Burns, 2004)

| **Internal customer focus and team processes** | 
| Internal customer focus refers to improvement efforts focussed on the employees, individual units and departments of an organisation who use output and are the beneficiaries of other department’s tasks and activities, i.e. services and products, to enable it to meet the needs of external customers. (Jablonski, 1992; Zeithaml & Bitner, 1996; Farner et al., 2001; Zemke, 2002) 

Team processes refer to members’ interdependent acts that convert inputs to outcomes through cognitive, verbal and behavioural activities directed toward organising tasks to achieve collective goals. Centrally, it involves members interacting with other members and their task environment. (Marks et al., 2001) |

Internal customer focus and team processes are necessary to enhance employee readiness, as it assures their engagement and alignment of involvement with their immediate manager and peers for the success of organisational improvement. (Dalu & Deshmukh, 2002; Dana, 2004) |

| **Common understanding of quality and customer requirements** |

The ability to understand the level of quality by all employees and satisfying the needs of external customers with the basic provision of processes to understand customer needs and requirements. (Dana, 2008) |

Studies have shown that by aligning the common understanding of quality and customer requirements with the provision of processes for the organisation to understand customer needs and requirements, the relationship between the improvement and the customer is made clearer, thus increasing employees’ empowerment to respond to external and internal customer concerns. Developing a climate of understanding quality and customer requirements based on employees’ perceptions is believed to influence employee readiness. (Dalu & Deshmukh, 2002; Dana, 2008) |
Logistic and system support

Logistic and system support allows employees to align their behavior with the improvement.
(Rafferty & Simons, 2006)

Studies have shown that climatic factors such as having logistic and system support, flexible policies and procedures, trust in peers and perceived organisational support increase employees’ readiness to support improvement. Logistic and system support allows employees’ behaviour to align with improvement and flexibility in policies and procedures allows for rapid change or improvisation to take place, thus emphasizing the employees’ belief in the organisation’s capability to facilitate, thus increasing their readiness.

Flexibility in policies and procedures

Creating flexibility which allows the ability to change or improvise rapidly required policy and structural changes to succeed in improvement.
(Eby et al., 2000; Rafferty & Simon, 2006).

Top management support

Refers to the role that top management plays in support of the improvement process.
(Devos et al., 2002)

Top management support is vital in leading and guiding the organisation through the process of improvement, thus creating and building the readiness of employees to support improvement. Management support may take the form of legislative and system support, technical and system support, or personal and administrative support.
(Armenakis et al., 1993; Eby et al., 2000; Susanto, 2008)

Perceived organisational support

Refers to the extent to which employees perceive that their organisation values their contributions and cares about their well-being, thus increasing their readiness to support improvement.
(Eisenberg et al., 1986; Eby et al., 2000).

3.1.4 Readiness from a multilevel perspective

Readiness can be theorised, assessed and studied at any level of analysis, as its construct meaning, measurement and relationship with other variables may differ across levels of analysis (Weiner, 2009; Rafferty et al., 2013). The multilevel manifestation of culture through its influence in an organisation can be observed from a top-down and bottom-up approach (Klein & Kozlowski, 2000). A multilevel (individual, group, organisation)
perspective needs to be considered in the conceptualising and development of organisational research to avoid incomplete and misdirected modelling or conclusions (Klein & Kozlowski, 2000; Erez & Gati, 2004). Recent studies have shown an interest in a more holistic and integrated exploration by conducting an integrated multilevel approach between the micro-domain’s focus on individuals and groups with the macro-domain’s focus on the organisation (Bonn, 2005; Bouckenooghe, 2008; Rafferty et al., 2013). As employee readiness is affected by the social context in which employees operate (Chatman, 1986; Jelinek, Litterer, 1994; Weick, 1995), an individual may act ‘as the group’, as a group member and ‘as the organisation’ when he embraces the values, beliefs and goals of the collective (Chatman, 1986; Jelinek & Litterer, 1994; Weick, 1995; Rafferty et al., 2013). This study argues that the common climatic factors identified based on a collective shared perspective from multilevel dimensions of employe’ readiness are most likely to bring about a positive organisational culture for effective improvements (see Figure 3.2).

Figure 3.2 Common perceptions of desired climatic factors affecting individual, group and organisational readiness.
3.1.5 Readiness from a multidimensional perspective (dependent variables)

Researchers have argued that human attitude is multidimensional and responds in the cognitive, emotional and intentional dimensions (Piderit, 2000; Holt et al., 2007; Weiner, 2009; Rafferty et al., 2013). Consistent with these arguments, the study considers the complete perspective of all three dimensions of readiness. The study argues that the identified climatic factors need to align to the three dimensions of employee readiness for improvements to be supported and succeed.

![Diagram showing alignment of climatic factors to cognitive, affective, and intentional aspects of employee readiness](image)

C – Alignment of climatic factors to the cognitive, affective and intentional side of employee readiness

Figure 3.3 Common climatic factors affecting the multidimensional aspect of employee readiness, i.e. cognitive, affective and intentional.

3.2 DEVELOPMENT OF A READINESS CLIMATE FRAMEWORK FOR EFFECTIVE IMPROVEMENT

A conceptual framework for this study is developed based on the synthesis of the above components to fill the research gaps. The framework aims at a holistic approach to identify the essential triggers and influencing climatic factors that promote employee readiness in a complex and adaptive organisation. Brunei’s unique absolute monarch-governed
organisational context provides new insight into the conduciveness that exists within the flexibility of monarch regimes. Brunei’s case represents an ideal example of a traditional administrative regime surviving the demands of modernisation while maintaining the country’s identity. If the hypothesis can be accepted, this would confirm the positive relationship between the identified dominant climatic factors and employee readiness on a multidimensional level. Figure 3.4 shows the proposed conceptual framework that is used to guide the study, and Figure 3.5 refers to the extended model, showing the development of incremental stages of employee readiness.
Figure 3.4 Conceptual framework of readiness and its climate.
Referring to Figure 3.5, the framework extends to a working model illustrating four incremental levels of employee readiness:

a) **Level 1**: Existing state of readiness. Extreme cases may result in no readiness or employees’ resistance to the implementation of improvements.

b) **Level 2**: Initial state of minimum readiness where essential climatic factors have the potential to trigger employees’ readiness.

c) **Level 3**: Higher state of readiness where influential climatic factors have the potential to influence higher levels of readiness to support improvements so they succeed.

d) **Level 4**: State of continuous readiness where the full range of selected climatic factors that have the potential to affect employee readiness to a certain degree to sustain improvement is considered.

Figure 3.5 Model showing the incremental stages of readiness.
3.3 CHAPTER SUMMARY

This chapter highlighted a number of key findings from the literature that led to the development of the conceptual framework. The chapter also emphasised the positioning of the perspectives that seek to fill the research gaps. The proposed conceptual framework draws together the relevant components, which will be used as a basis to guide this research in answering the research question and testing the hypothesis. Finally, the framework aims to demonstrate how employee readiness can be promoted in a complex and adaptive organisation. The next chapter reviews the research methodology, approaches and strategies used in this study.
CHAPTER 4 – METHODOLOGY AND RESEARCH DESIGN

4.0 CHAPTER OVERVIEW

In addressing the components of the proposed conceptual framework, answering the research question and testing the hypothesis, a critical research approach was adopted. In relation to understanding what affects employees’ behaviour to support improvements and how employee readiness can be triggered and influenced within a complex and adaptive organisation, it is important to view both aspects of organisational management. The epistemology of a pragmatic approach helped in the understanding of both the subjective and objective views. Both qualitative and quantitative methods were employed, including a cross-sectional survey. Triangulation of both qualitative and quantitative methods with the literature review increased the internal and external validity of the results. The evidence presented in this study is the result of data gathered in two stages, Phase 1 and Phase 2. This research focuses on the management and social science areas. Relying on the organisation as the unit of analysis, the sampling of data combines both probability and non-probability methods covering a large data sample across several departments in the Public Works Department to achieve generalisation of the results.

4.1 CHAPTER INTRODUCTION

This chapter discusses the research design and methodology relating to the justification of the approaches and strategies used in this study. The discussion of these aspects led to the choice of appropriate research methods in order to answer the research question and test the hypothesis (Figure 4.0). The background of the studied context is also included. Specifically, it is intended to demonstrate the research process. The methodology used in this study is discussed in the following sections.
Problem, aims and objectives, literature review, research question, hypothesis, conceptual framework

Research design – Cross-sectional case study

Proposed research approach – mixed

Qualitative

Quantitative

Interview questions
Organised session
Documents and materials
Organisational contact, multi-level employees

Cross-sectional survey
Questionnaires through direct contact
Organised session
Organisational contact, multi-level employees

Data analysis method (qualitative)
Identifying emerging themes

Data analysis method (quantitative)
Descriptive, factor analysis, statistical analysis

New framework and model of employee readiness climate for effective improvement

Generalizing data collection in several public service organisations

Answers research question: Identification of essential and influential climatic factors that trigger and influence employees’ readiness to support public service improvements in Brunei

Hypothesis tested: Identified climatic factors have a positive relationship with employees’ multidimensional readiness for effective public service improvements

Figure 4.0: Research design process
4.2 RESEARCH METHODOLOGY
Research methodology refers to the principles and procedures of logical thought processes which are applied to a scientific investigation (Klien & Myers, 1999; Fellows & Liu, 2003). Research is simply an organised, data-based, critical process of thoroughly studying and analysing the situational factors surrounding a problem in order to seek solutions to it (Cavana et al., 2001; Neumann, 2006). This study falls into the management and social type of research, as it relates to the study of employees’ attitudes and behaviour for effective improvements in public service organisations (Cavana et al., 2001).

4.3 CHOICE OF RESEARCH PHILOSOPHY
Given the complexity of research, researchers need to identify the philosophy of the research to determine how the research should be conducted and what the results of the research should accomplish (Cavana et al., 2001; Crossan, 2003; Cohen, 2007). There are three paradigms commonly used in business, education, management, social and behavioural science research, namely positivist, interpretivist or constructivist and critical or pragmatic research (Tashakkori & Tedlie, 1998, Cavana et al., 2001; Cohen et al., 2007). Given the context of this study, it is argued that employee readiness is more likely to support improvements if the conduciveness of the organisational climate is recognised from the employees’ perspective. It is for this reason, which links to the aim and objective of this research, that critical research is the most appropriate type of research. The aim of critical research is to uncover beyond surface illusions (Cavana et al., 2001). Given the complexity of the readiness concept, this research adopts a holistic approach, taking into consideration the subjective and objective aspects of improvement management. Both subjective and objective views are required to uncover a deeper understanding from the employees’ perspective of the conducive climate necessary to promote their readiness to support improvements. Thus, critical research, also known as pragmatic research, would help to uncover the unintended climate of employees’ readiness that emerges from self organizing activities as a means-to-adapt and survive complex challenges. Triangulations of non-empirical evidence with a combination of an inductive and deductive approach were adopted to further validate the results. Common climatic factors that would trigger
and influence employees’ readiness for any nature of improvement were identified. This research can be categorised as management research applied in a social context.

The consideration of a positivist research alone using a deductive approach would have been limited by its reliance of all aspects to numbers and fail to represent specific social groups and an understanding of individual cases (Themistocleous, 2002). In this study, interpretivist research using an inductive approach was necessary to triangulate and validate the evidence from quantitative result. Furthermore, it is more likely that people experience physical and social reality in different ways (Cavana et al., 2001; Pather & Remenyi, 2004).

Complexity theory is an emerging paradigm in educational, social and management research (Morrison, 2002; Dijk, 2006). Complexity theory provides a holistic approach and focuses on relationships within interconnected micro and macro networks to understanding phenomena (Youndblood, 1997; Cavana et al., 2001; Morrison, 2002). Complexity theory enables multiple causality, multiple perspectives and multiple effects to be charted. Complexity theory not only requires the need for several perspectives of a situation (multi-methods), but resonates with the critical approach, which argues for different voices and views to be heard (Cavana et al., 2001). Thus, complexity theory helps explain the emerging processes of climatic factors and provide managers with a means of facilitating employees’ readiness in a non-persuasive manner and presents a challenge to management research.

4.4 CHOICE OF RESEARCH DESIGN ADOPTED

`Research design is a blueprint of research, dealing with at least four problems: what questions to study, what data are relevant, what data to collect, and how to analyze the results’ (Yin, 1994). The research design also ensures that the evidence obtained allows the researcher to answer the research question as unambiguously as possible (Aaker et al., 2007). In social sciences and management (Remenyi et al., 1998; Nachmias Frankfort & Nachmias, 1996), several research designs are employed such as cross-sectional design, longitudinal design, action research, ethnographic research, quasi-experimental design, contrast group design, planned variation design, panel and time series design, control series
design, combined design, pre-experimental design and case studies. In order to get close to reality, it is important that the research is conducted in its natural setting without much interference from the study. In view of the time and resource constraints, longitudinal, action, ethnographic and experimental research approaches were not possible. Instead, a combination of case study research and cross-sectional study research was adopted in order to achieve the objectives under different organisational contexts. In addition, no research of this nature has been conducted in Brunei’s public service organisations. Furthermore, to identify the required conduciveness that is more likely to stimulate employees’ readiness to support improvements, it was important that the data gathered were based on the employees’ perspective.

4.4.1 Cross-sectional design and case study design

According to Nachmias Frankfort and Nachmias (1996), cross-sectional design is predominantly employed in social science, using the survey method. The main advantage of cross-sectional design is that it can be conducted in natural settings and allow researchers to employ random probability samples. Thus, it can be applied to a broader population and the findings can be generalised to real-life situations, therefore increasing the external validity of the study. Internal validity can be improved by including auxiliary information as a control against rival hypotheses and using statistical techniques such as path or causal analysis. In order that the research is conducted in its natural setting and allowing for broader sampling across several Departments, cross sectional design was considered.

A case study was considered as the study is more applicable to social research. According to Yin (1989), the case study is defined as an empirical inquiry that investigates contemporary phenomena within its real-life contexts, when the boundaries between phenomena and the contexts are not clearly evident and multiple sources of evidence are used. It is more applicable in answering research questions associated with ‘who’, ‘why’ and ‘how’ in management research. The aim of this study is to identify the required climatic factors and to understand how these climatic factors affect employee readiness in a stimulating manner for effective improvements. The appropriateness of applying case
study design in this study is that it allows information to be gathered when no other research design is possible. However, it is weak in both internal and external validity and causal inferences are difficult to achieve. Thus, a combination of a cross sectional and case study design was found to be appropriate in order to answer the research question and test the hypothesis.

4.4.2 Other research design that was not considered

Other research design that was not considered includes quasi-experimental design, longitudinal design, experimental design, action design and ethnographic design. Quasi-experimental design is similar to cross-sectional design and depends on statistical analysis techniques as the method of control. Contrast group design, planned variation design, panel and time series design are quasi-experimental designs. To overcome the limitation of this design, multivariate methods of statistical analysis are used, such as cross-tabulation, multiple regression and path analysis. Due to the nature of research question which aims to identify the climatic factors that trigger and influence employees’ readiness to support improvements, quasi-experimental design was found to be not appropriate.

Longitudinal design refers to a study that is conducted over a substantial period of time to monitor the progress of a situation and to observe development as a result of a series of interventions over time (Pettigrew, 1985). In business and management studies, this type of design offers the best opportunity to obtain useful insights into practices and policies, and is thus considered more valuable. From a research perspective, a longitudinal study is useful, as it allows the researcher to capture improvement in the recipients’ experience in accordance with the actual improvement process in actual time (Pettigrew, 1990). However, due to time and resource constraints, a longitudinal study was not possible. A cross-sectional method, in the researcher’s view, is more appropriate for this study.

Experimental design allows researchers greater control over extrinsic and intrinsic variables, thus strengthening the internal validity. It also allows more control over the independent variables so that the direction of causation may be determined. However, because it takes place in a controlled environment and not in its natural setting, its external
validity is weak. Because researchers rely on volunteers, the sample may not be representative of the population of interest, thus preventing generalisation to the population and limiting the scope of the findings (Nachmias Frankfort & Nachmias, 1996). Due to the need for the study to be conducted in its natural setting to get close to reality over a large population sample, this type of study was not appropriate.

According to Cohen et al. (2007), action research is a powerful tool for change and improvement at the local level. It involves forming a hypothesis with reference to a static picture of the organisational situation, and manipulating variables under the researcher’s control in a natural setting and comparing the results before and after. The method used may be both qualitative and quantitative and is phenomenological in nature. However, it relies heavily on the participants’ commitment and participation throughout the study (Remenyi et al., 1998). Due to the time, accessibility and availability constraints of participants, this design was not appropriate for this study.

Ethnographic research is a portrayal and explanation of social groups and situations in their real-life contexts (Arsenault & Anderson, 1998; Flick, 2004). Ethnographic research is a description and interpretation of a cultural or social group or system, observed over a prolonged period (Alasuutari, 1998; Creswell, 1998). The focus of investigation is on the everyday behaviours (e.g. interactions, language, rituals) of the people in the group, with the intent to identify cultural norms, beliefs, social structures and other cultural patterns (Leedy & Ormrod, 2001). Ethnographic research is based on observing patterns of human activity and societies through the use of methods such as observation, interviews and questionnaires from which the researcher makes deductions based on the respondents' visions. Generally, all ethnographic research shares the same objective of laying bare, from within, the logic that informs and organises the population's life and way of thinking (Mohamed, 2006). Although, the complexity of the interrelating aspects in relation to the studied group can be unravelled, however the design has limited generalisability to other topics or domains and takes longer than most other kinds of research. This study involves an integration of several elements of perspective. A large coverage of multilevel sampling is needed for generalisation across other public domains. Due to the time constraint of the
research period and the participants, ethnographic research was found to be inappropriate for this study.

4.4.3 Issues integral to the research design

According to Cavana et al. (2001), the issues relating to decisions that are integral to a research design comprise:

- Purpose of the study (exploratory, descriptive, hypothesis testing or case study)
- Study setting
- The extent of researcher interference
- The time horizon (temporal aspects of study)
- Unit of analysis
- Sampling design
- Data collection methods
- Data analysis.

The basic aspects of research design that were adopted in this study are discussed in the following paragraphs. Referring to the purpose of study, studies can be either exploratory, descriptive, or they can be conducted to test hypotheses depending on how far the research topic has advanced (Cavana et al., 2001). This research begins with an exploratory study followed by descriptive case studies and hypothesis testing. It relates to answering the research question, the objectives and aim of the research. In this study, the intention was to examine if the perception of the employees varies in different organisational contexts in relation to identifying the climatic factors that promote employees’ readiness to support improvements. The inquiry can only be addressed through an exploratory study, based on the employees’ perception in absolute monarch-governed public service organisations in Brunei Darussalam. The study is followed by descriptive studies such as demographic details in order to learn and describe the characteristics of the employees and organisations that are involved in this study. Hypothesis testing is also adopted based on a correlation study to determine the positive relationship between the identified climatic factors and employee readiness from a multidimensional perspective. Case studies of several departments in the Public Works Department were undertaken in this study. The selection of the organisations was based on the common issues faced by these organisations, similar operating functions and organisational structure as well as the implementation of improvement programmes.
The field study was conducted in its natural environment with less interference in the work activities (non-contrived setting). Exploratory and descriptive studies are regularly conducted in non-contrived settings (Cavana et al., 2001). It was necessary to conduct this study in a non-contrived setting, as the study aims to capture the employees’ perspective of the emerging conduciveness that promotes employee readiness during periods of instability or chaos. The purpose of collecting data in several public service organisations simultaneously was to generalise the results and identify the necessary conduciveness that relates to achieving the research objectives and answer the research question. Data collected at one point in time using a cross-sectional design were considered sufficient.

As a comprehensive study, it was necessary to adopt the organisation as the unit of analysis, i.e. the Public Works Department. However, data were collected from four departments in the Public Works Department that were known to have experienced recent/ongoing planned and unplanned improvements, in order to generalise the findings. These were the Water Services Department, the Road Department, the Drainage and Sewerage Department and the Technical Services Department. Multilevel sampling included the top managers, middle managers and non-managers who were directly involved in the improvement initiatives. Due to the high connectedness of unity between individuals, teams, units, sections and departments in the Public Works in Brunei, almost all organisational members work as individuals and as team members of their organisation and the national taskforce. Thus, the perception of each participant is based on their individual and team member perspectives, contributing to a common perception from individual, group and organizational readiness. The data collection methods and data analysis are discussed in section 4.7 and 4.8.

4.5 CHOICE OF RESEARCH APPROACH ADOPTED

There are two types of research approach, namely the empirical and non-empirical. An empirical approach involves investigative, expressive, logical or prognostic research (Hussey & Hussey, 1997) and fieldwork observations (Easterby et al., 1991), while a non-empirical approach is based on reviewing the existing literature in a subject area and then
using it as a reference for the research. For this research, both empirical and non-empirical approaches were adopted. The study involves both qualitative and quantitative research methods in order to fulfil the research objectives in answering the research question. However, the study commences with a quantitative method and uses qualitative method as a means of triangulating the quantitative results and integrating any additional findings. The study focuses on investigating employees’ views among several departments in the Public Works Department on the desired climate that promotes their readiness. Demographic contexts through numerical and interview data were gathered by different data collection methods, including interviews and surveys. It is also important in this study not just to identify the desired conduciveness but to also understand how the climate evolves in order to find the means to facilitate its conduciveness within a complex and adaptive organisation.

4.5.1 Quantitative approach
According to Cavana et al. (2001), a quantitative approach is based on deductive reasoning in that the process involves starting with a theoretical proposition and then moving towards concrete empirical evidence. This process involves developing a theory and hypothesis, designing a research strategy, followed by collecting and analysing data to test the hypothesis. Compared with a qualitative approach, the strength of a quantitative approach is such that its methods produce quantified reliable data that can be generalised to a larger population. Quantitative approach is most appropriate for this study that allows an assessment of employees’ perception relating to the desired climatic factors that promotes their readiness. Using quantitative approach, it allows comparison to be made against literature findings. Quantitative approach focuses on correlation between variables. However, its weakness is that it decontextualises human behaviour and removes the event from its real-world setting and does not take into consideration the effects of other variables that are not included in the model. Thus, it is important to combine with a qualitative approach for a more accurate conclusion.
4.5.2 Qualitative approach
For a qualitative methodology, field research is the most central strategy for data collection. It is the study of people acting in the natural course of their daily lives, thus requiring that the study is conducted in its natural setting. A qualitative approach is based on an inductive process involving observation of certain phenomena and arriving at certain conclusions. The process involves collecting data and analysing it for patterns and themes, formulating relationships and developing a theory (Cavana et al., 2001). In this study, qualitative approach allows for emerging themes of dominant climatic factors to be identified and compared with quantitative result. Qualitative approach allows rich, detailed data that are closely related to the real-life improvement events that participants experience daily to be extracted. It focuses on processes and the reasons ‘why’. Its weakness is that data collection and analysis is labour-intensive and time-consuming.

4.5.3 Mixed method or triangulation approach
Consistent with other researchers, a combination of both qualitative and quantitative method is more appropriate for this study that allows for a more integrated approach to address the different aspects of the research problem (Brewer & Hunter, 1989; Bryman & Burgess, 1994; Cohen, 2007). The rationale for the appropriateness of a mixed method for this study is that it combines the benefit of both qualitative (capturing the unexpected richness in explanations and participants’ contribution of information) and quantitative methods (ability to compile large amounts of information) to create a holistic approach to data collection and analysis (Cresswell, 2002; Cavana et al., 2007), thus providing more insight into ‘what works’.

By using a triangulation approach, both the subjective and objective points of view can be embraced (Thurmond, 2001). As argued by Nachmias Franfort and Nachmias (1996), the use of a combination of methods in the same research can partially overcome the deficiencies that occur from a single investigator. Some researchers support the use of a mixed method approach in order to understand the usefulness of complexity theory in explaining and justifying the process aspect of why and how particular ideas interrelate and are important (Morrison, 2002; Hamilton et al., 2007; Lam Soh et al., 2011). Mixed method approach is commonly adopted to complement the limitations of both approaches.

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in gaining accurate conclusions (Kelly & Allison, 1999; Lewin & Regine, 2000; Stacey, 2000, 2001). Data is analysed qualitatively and quantitatively at the multi-hierarchical levels within the organisation.

4.6 CHOICE OF RESEARCH STRATEGY ADOPTED

The research strategy presents a general plan for answering the research questions (Saunders et al., 2000) and achieving the research objectives (Al Hamar, 2010). According to Remenyi et al. (1998), the researcher must be able to acknowledge the epistemological, ethical and ontological assumption of the research. Epistemology is based on what the grounds of our knowledge are, whether the researcher has positioned the research in any one of the polarities of the subjective-objective continuum, i.e. positivism or anti-positivism. Ontology is whether the object of investigation is the product of consciousness (nominalism) or whether it exists independently (realism).

4.6.1 Epistemology assumption

The epistemological position taken for this study is that of the pragmatism paradigm (Brewer & Hunter, 1989; Reichardt & Rallis, 1994) and the combination of quantitative and qualitative methods (also referred to as mixed method). The type of study will be that of a field study. This is based on the need to study on the ground and understand the subject-object interdependency and relationship between organisational climate factors and employee readiness. The application of complexity theory adds another perspective to understand how employee readiness works in complex and adaptive organisations such as public service organisations. The argument in considering the use of complexity theory is that public service organisations function in a highly networked hierarchical structure. Each organisation has separate roles and functions but are united towards achieving one common goal. Hence, every individual, team, subunit, section, department and ministry is interrelated and influences each other depending on the level of interaction. Thus, under chaotic and unstable conditions, complexity theory is used to explain the emergence of unintended conduciveness as a result of employees’ self-organising process in order to survive. Thus, it is important to recognise the conducive climatic factors that manifest as a result of self-organising through the interrelated and interacting networking activities.
within the organisation. It is important that the study was conducted in a holistic manner and in its natural setting. Therefore, taking a pragmatism position, which has emerged since the 1960s in social and behavioural research, allows for an integrated, mixed method approach (Tashakkori & Teddlie, 1998) to be adopted. The results will provide some level of understanding of how a positive organisational climate can influence employees’ readiness to support improvement. The adoption of mixed methods for data collection and methodology has been used for readiness and management research (e.g. DiPofi, 2002; Hamilton et al., 2007; Lam Soh et al., 2011).

4.6.2 Ontology assumption

For this research, the organisational ontology views and assumes the organisation as both a noun, a social actor, a real entity (‘thing’) (Whetten, 2005), and a verb, a process of organising and emerging flux (Tsoukas & Chia, 2002). This refers back to the conceptual framework of this research in that it considers several components: the organisation (an entity), the organisational climate (context and process) and the employees (social actors). Thus, the ontology approach takes into account looking at an organisation as complex and adaptive and the human social interaction of self-organising activities as well as the emerging conditions that affects employees in a positive manner during chaos.

The research approach is therefore based on approaches that apply to both management and social research. The research will focus on the linear prediction relationship between organisation climatic factors and the positive readiness of employees to support and succeed improvement, thus leading to quantitative research. However, in considering a synergy of both planned and unplanned improvement, complexity and chaos theory is used to explain the uncertainty and manifestation of self-organisation and the emergent pattern of conducive climate factors. Qualitative research is necessary to complement the limitations of quantitative research. The use of complexity theory to explain for the emerging conduciveness would extend the study in not only identifying the climatic factors but also understanding how the climatic factors work with employee readiness in a complex and adaptive organisation. This knowledge would provide further insight into
how best to facilitate the emergence of conduciveness in promoting employees’ readiness to support improvements.

4.6.3 Ethical assumption

In this study, the ethical assumption in the form of the procedures undertaken complied with the following requirements. In terms of the participants, no vulnerable groups or participants are involved in this study to avoid any unintentional distress. Examples of vulnerable participants include pregnant women, people with mental illness and those employees over 65 years of age. The surveys and interviews were conducted with the help of a focal person from each department for the collection of the questionnaires. The purpose, direction and methodology and explanation of the study were communicated to the organisational contact (researcher’s focal person) and the participants in both English and Malay in a clear manner. With consent from the Director General of Public Works and the directors of each department, the study was conducted across multilevel employees. All participants were given a participant information sheet (sample can be obtain from researcher) which explained the possibility that they may not benefit from the study. However, the management responsible for the improvement will be informed of the results of the study. The organisational contacts and all participants were notified of their identity confidentiality in that each respondent is assigned a code. This complies with the Data Protection Act 1998. All data collected is secured in a safe room located at the Water Services Department, Brunei Darussalam. Each participant was offered the opportunity to request a copy of the research findings or report. Each participant was assured of their safety against any personal impact if they felt anxious or distressed about giving information and that they were free to withdraw at any stage. In relation to the quantitative survey questionnaires, participants were notified that once the survey is completed and submitted, their informed consent could be withdrawn if they wished.

A risk assessment relating to the organisation and the participants involved in this study was conducted prior to commencing the study. The possibility of creating anxiety among the participants (improvement recipients) with regards to their experiences and feelings was noted. Counseling and debriefing by the researcher will be provided, if necessary. For
the qualitative interviews, each participant was provided with an Information sheet and Consent form relating to the study, for clarification and endorsement prior to the interview. For the quantitative survey questionnaires, an introductory explanation was given to help clarify and explain its aims clearly and that participation was voluntary. Completion of the survey was considered to be informed consent and the participants were given the chance to withdraw up to the point of submission, after which the informed consent could not be withdrawn.

The interviewer’s mental health is not considered to be a critical issue in this study, as it is conducted on familiar ground (in the researcher’s own country and workplace). Advice from the researcher’s supervisor was sought regarding input and debriefing in the operation of the data collection activities. The issue of data collection boundaries is not considered a major issue, as the participants were volunteers and full assistance was provided at all stages of the data collection. In the case that the interviewees faced difficulty in understanding the questions, rephrasing and feedback from the researcher reduced any anxiety and helped to clarify any misunderstanding. Interviews were conducted in a closed room to maintain confidentiality. Reference was made to the University Code of Practice on Investigations involving Human Participants.

4.6.4 Research strategy adopted

Referring to Table 3.0, Yin (2003) demonstrates how each of the five common research strategies represents itself as a function of the research condition in terms of the type of research question, the control an investigator has over actual behavioural events and the focus on contemporary as opposed to historical phenomena.
Table 3.0: Research strategies versus characteristics (Yin, 2003).

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Form of Research Question</th>
<th>Requires Control of Behavioural Events</th>
<th>Focuses on Contemporary Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>How, Why?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Archival Analysis</td>
<td>Who, What, Where, How Many, How much?</td>
<td>No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>History</td>
<td>How, Why?</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Case Study</td>
<td>How, Why?</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Referring to the objectives of this research in answering the research question, the following research strategies were adopted, as shown in Table 4.0.

Table 4.0 Research strategies used in this study.

**AIM:** To identify the essential and influential climatic factors that promotes employee readiness for effective public service improvements in Brunei Darussalam.

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STRATEGIES USED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1:</strong> To identify the current issue and review the literature on the readiness concept and its climate and the characteristics of public service organisations. (Different perspectives are looked at to help understand the linkages in a more comprehensive and holistic manner.)</td>
<td>EXPLORATORY Non empirical – Literature review on the complexity of the readiness concept, public service organisations as complex and adaptive and conducive readiness climate.</td>
</tr>
<tr>
<td><strong>Subsidiary research question:</strong> What do we understand about promoting employees’ readiness to support improvements in public service organisations?</td>
<td></td>
</tr>
<tr>
<td>Objective 2: To investigate and identify the desired essential and influential climatic factors that promote employees’ readiness to support improvements in Brunei’s public service organisations.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Objective 3: To explore the workings of Complexity theory in explaining how employees’ readiness can be stimulated to support improvements in public service organisations.</td>
<td></td>
</tr>
<tr>
<td>Main research question: What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations?</td>
<td></td>
</tr>
<tr>
<td><strong>DESCRIPTIVE AND HYPOTHESIS TESTING, CASE STUDY</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Unit of analysis:** Organisation (collective shared perception at multilevels across several departments under one main organisation)  
**Type of investigation:** Correlational  
**Time horizon:** Cross-sectional study  
**Extent of researcher interference:** Minimal, i.e. studying events as they normally occur  
**Measurement and measures:** Items (measure)  
**Qualitative data collection:** Interviews  
**Quantitative data collection:** Questionnaires  
A critical, also referred to as a pragmatic approach, is appropriate, involving both subjective and objective views. Subjective view based on employees’ perception and objective view in understanding the organisation as complex and adaptive as well as the organisational conducive climate. |
| Survey strategies involving questionnaires (face-to-face and organised group sessions) and interviews (face-to-face and organised group sessions). Case studies were found appropriate to achieve objective 3 involving a large-scale survey over four departments in the Public Works Department. |
| **Objective 4: To use the results, test the hypothesis, answer the research question and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.** |
| **Subsidiary research question:** How does employee readiness evolve and be stimulated to support any nature of public service improvements in complex and adaptive organisations in the Brunei context? |
| **Case studies of several public service organisations in Brunei were applied to combine and analyse the outcomes of all previous methods (questionnaire and interview surveys) to identify the necessary conditions (climate) for employee readiness. A conceptual framework and working model was developed to demonstrate how employee readiness can be stimulated for effective improvements. Data were analysed to test the validity of the results, test the hypothesis and answer the research question.** |
The different types of case study are dependent on the research question, for example exploratory, descriptive and explanatory case studies are used to answer what, how and why respectively (Yin, 1994). This research begins with an exploratory study, followed by a descriptive case study and hypothesis testing and generalising case studies. They refer to the main research question and its subsidiary questions:

- **Subsidiary research question**: What do we understand about promoting employees’ readiness to support improvements in public service organisations? – Exploratory study.

- **Main research question**: What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations? – Descriptive, hypothesis testing, case studies.

- **Subsidiary research question**: How does employee readiness evolve and be stimulated to support any nature of public service improvements in complex and adaptive organisations in the Brunei context? – Case study (interviews and survey).

According to Leedy and Ormrod (2001), when planning the research strategy, it is exceedingly important to consider the kinds of data that an investigation of the problem will require and the feasible means of collecting this data. Case studies can employ several data collection methods, including direct or indirect observations, interviews and the study of documents and records (Yin, 1994). In this research, the case study comprised various data collection methods, which are explained in the following section.

### 4.7 DATA GATHERING

According to Nachmias Frankfort and Nachmias (1996), data is collected in order to test hypotheses and provide empirical support for explanations and predictions. Generalisation of the explanation and prediction derived from the data collected forms a major stage of the research process. The data collected refers to a small number of cases or sample that
reflects the population. The population refers to the entire set of relevant units of analysis or data.

### 4.7.1 Field research setting and data source

Data were collected over a six-month period, commencing in January 2011 and ending in July 2011, and involved several departments of the Public Works Department in Brunei Darassalam, namely the Water Services Department, the Road Department, the Drainage and Sewerage Department and the Technical Services Department. The selection of these departments was based on ongoing improvements within them, both planned and unplanned and triggered by environmental, administrative, social, financial and technical issues. Recent changes in administration involved major reshuffling from the top level (ministers, permanent secretary, director general, directors, assistant directors) to middle managers (senior executive engineers, executive engineers and engineers). Newly appointed managers were driven by the urgency and need for a new direction and mindset in order to adapt and survive the present and future challenges. Improvements involving all staff in the organisation influenced a positive response to the research study at the time it was conducted and provided a large population of participants for sampling purposes. Participants were selected who have been involved in planned and unplanned improvements and play the role of improvement agents and team members. The timeline for recollection of experience is one year. Almost all of the participants from the list provided by the focal person were team members of a taskforce group, thus related their experience as an individual and as a team member. Participants were selected from multi-levels comprising of top managers, middle managers and non-managers.

### 4.7.2 Data collection methods for the research

The research design and methods should be carefully planned in order to achieve the research aims and objectives (Bouma, 1996). According to Nachmias Frankfort and Nachmias (1996), there are four general forms of data collection method, such as observational, survey research (personal interviews and questionnaires), secondary data analysis (analysis of existing documents) and qualitative research. To complement each method’s limitations and weakness, a triangulation method, i.e. using more than one form
of data collection to test the same hypothesis, may be feasible to provide more accurate results.

For this study, a pragmatic approach involving the triangulation of both empirical (qualitative and quantitative) and non-empirical evidence (literature) was adopted to achieve the main aim of this research. In the Phase 1 study, both qualitative interviews and a quantitative survey were conducted on a face-to-face basis, as this was found to be more convenient and faster. There were time constraints due to participants’ commitments to their work schedule, thus the study was conducted on the spot based on their availability. For the final study, a quantitative method was conducted by distributing questionnaires in arranged sessions and collecting on the spot. Figure 4.1 shows the stages of the data-gathering process undertaken, where the research methodology is defined to achieve the research objectives. The research stages are explained in the following sub-sections.
**First Year – Stage 1**

**Main aim of study:** To identify the essential and influential climatic factors that promotes employee readiness for effective public service improvements in Brunei Darussalam.

**Objective 1** – To identify the issue and review the literature on the readiness concept, its climate and the characteristics of public service organisations.

<table>
<thead>
<tr>
<th>Problem statement</th>
<th>Literature review</th>
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<tr>
<td>Identifying research gap, development of research question and hypothesis</td>
<td>Conceptual framework of study</td>
</tr>
<tr>
<td>Preparation for field study – Development of quantitative (survey) and qualitative (interview) questionnaires</td>
<td>First year report and viva</td>
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**Second Year – Stage 2**

**Objective 2** – To identify the desired essential and influential climatic factors that promote employees’ readiness to support improvements in Brunei’s public service organisations.

**Objective 3** – To explore the workings of complexity theory in explaining how employees’ readiness can be stimulated to support improvements in Brunei’s public service organisations.

<table>
<thead>
<tr>
<th>Mixed Method – Quantitative and Qualitative Method (Phase 1 study)</th>
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<tr>
<td><strong>Quantitative Method</strong></td>
</tr>
<tr>
<td>Prepare survey and pilot study</td>
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<tr>
<td>Survey questionnaire (Selected climatic factors from literature)</td>
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<tr>
<td>Cross-analyse data – Identify dominant climatic factors common to any nature of improvement</td>
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<tr>
<td>Data output and results</td>
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</table>

**PHASE 2 STUDY – Quantitative method**

| Development of itemised quantitative survey questionnaire (integrate qualitative and quantitative findings) |  |
| Prepare final survey and pilot study |  |
| Survey and analyse data |  |
| Data output/results |  |

**Thesis Contribution**

**Academic:**
- To provide a readiness climate framework for effective improvements
- To provide a working model demonstrating the desired essential and influential climatic factors that can stimulate employees’ readiness to support any nature of improvements.

**Practical:**
- Provide a means of developing a tailored readiness assessment tool for effective public service improvements in Brunei Darussalam.
- Assist managers using the research findings to facilitate the emergence of conduciveness that promotes employees’ readiness to support improvements.

December 2009 to November 2010

Figure 4.1 Overall methodological approach for this research.
4.7.2.1 Literature review
The first stage of research involves a literature review that forms an essential step in the process of defining the research problem (Blumberg et al., 2005). According to Cavana et al. (2001), a well-conducted literature review provides the foundation for developing a comprehensive conceptual or theoretical framework from which research objectives can be developed for testing. In achieving the first objective of study, a general literature search focussed on reviewing the literature on the concept of readiness and its climate for improvement as well as understanding the characteristic of public service organisations. The multifaceted readiness theory, complexity theory and chaos theory as well as the improvement climatic factors formed the basis of the interrelated components within the conceptual framework. These components were tested to identify the essential and influential climatic factors as percept by employees that stimulate their readiness to support improvements. Potential climatic factors were selected from the literature and used to formulate the preliminary questionnaire contents. These selected climatic factors are discussed in Chapter 2. A holistic approach that incorporates the multiple dimensional perspectives of the readiness concept and related elements were vital in order to get close to reality. The literature review involved a continuous process in order to update new issues and gaps. Brunei’s context forms an ideal study context for understanding how employees’ readiness evolves within a complex and adaptive system.

4.7.2.2 Survey
To achieve the second, third and fourth objectives of this study (explained in Chapter 1), the survey strategies comprise face-to-face interviews and hard copy questionnaire surveys. Due to the time constraints and challenges faced during the data collection period, surveys were most effectively conducted in arranged group sessions and on-the-spot face-to-face surveys. A letter of consent to conduct the study was provided by the Director General of Public Works, the organisational contact. The preliminary stage of the survey involved both qualitative (face-to-face semi-structured interviews) and quantitative (questionnaires) methods, which were conducted simultaneously. Sampling covered the whole of the organisation’s list of improvement agents from directors to chief technical assistants, stationed at the head office. By investigating employees’ experience and
perception of what works based on past improvement success, essential and influential climatic factors were identified. Both planned and unplanned improvements were referred to. The study commenced with a qualitative method followed by a quantitative method. This was to abstract an immediate perception of the employees’ desired climate from the interviews without the influence of the survey content of potential climatic factors, extracted from the literature review. Based on comparative frequency analysis of phase 1 qualitative and quantitative results, the dominant climatic factors identified were later developed into itemised statement measurements. These itemised measurements for each dominant climatic factor were surveyed in phase 2 for employees’ agreement across organisations.

The contents of the final quantitative survey are the result of integration between the dominant climatic factors selected from the literature with the additional findings from the study. The results of the study contributed to the development of a readiness climate framework and a working model demonstrating how employee readiness can be stimulated and facilitated for effective improvements. Based on the open coding techniques articulated by Strauss and Corbin (1998), themes were inductively generated from the multilevel perspective of the employees. Through a series of selective coding (Strauss & Corbin, 1998), the emerging themes were consolidated and generalised to present the desired essential and influential climatic factors necessary to promote employee readiness for effective improvements.

4.7.2.3 Phase 1 survey questionnaire content

Questionnaires were designed in two stages: Phase 1 and Phase 2. Both the interview and survey questionnaires were carefully designed and reviewed, followed by a pilot study in each organisation to ensure an effective design. English and Malay versions of the questionnaire were designed and the quality of the Malay version was checked and approved by the Acting Director of the Bureau Linguistic and Language, Brunei. The aim of the Phase 1 survey questionnaire was to get employees’ perspective on the desired essential and influential climatic factors that would promote their readiness during planned and unplanned improvements. The questionnaire consists of two sections. The first section
of the questionnaire was used to create a profile of the employees’ background and current level of readiness in improvement initiatives. The background information requested included organisation, age, gender, service age, position, qualifications and frequency of planned and unplanned improvements. The second section consists of two parts. Part 1 asks the participants to select the influential climatic factors from a list of potential climatic factors, for both planned and unplanned improvement conditions. Part II requests the participants to select not more than ten factors that they feel are essential to trigger their readiness for both planned and unplanned improvement conditions. The participants were also allowed to add any additional climatic factors that they consider important and relevant. All data was put in the Excel program and statistical frequency analysis was conducted and compared with the interviewed results for similar dominant themes of climatic factors.

4.7.2.4 Phase 1 interview questions

Interviews provide the opportunity to uncover rich and complex information from an individual. However, in order to uncover the rich information, the interview has to be well designed and professionally conducted (Cavana et al., 2001). Neumann (2006) identifies three categories of interview, namely structured, unstructured and semi-structured. For this study, a semi-structured interview was found to be most appropriate, as it offers a more flexible and strategic means of obtaining data. By conducting a semi-structured interview, the interviewer was able to explore the current situation, the possible causes and factors of readiness and recognise the less obvious and unintended climatic needed for employee readiness to support improvements. A structured interview was not considered, as it seemed too rigid to identify the important factors that are not obvious, and an unstructured interview was too time-consuming over a large sample.

The semi-structured interview questionnaires in Phase 1 were designed in two categories: one set for the organisational contact and top managers (directors and assistant directors) and another set for multilevel employees (middle managers and non-managers). The first set of interview questionnaires consisting of ten questions (see Appendix 2) were aimed at the organisational contact and top managers. The strategy of the questions was to get an
overview of the current state of the organisation in relation to improvement programmes and the vision in achieving the nation’s goal. The interview questions also relate to obstacles and the capacity of the organisation to facilitate improvements. The top management’s view of the essential and influential climatic factors that would promote employees’ readiness to support improvements formed part of the interview content.

The second set of interview questions allocated for middle managers and non-managerial employees consists of six questions. The questions relate to identifying the influential and essential climatic factors in planned and unplanned improvement and obstacles to employees succeeding in those improvements. Questions include employees’ views on planned improvement, the availability of a readiness climate assessment tool and the factors that contributed to the success of past improvements. During the study, telephone interviews and computer-assisted interviews were least favourable, as participants spent most of their time outside the office and the majority were not comfortable with handling computers. Thus, interviews and surveys were conducted on the spot based on the respondents’ availability, during working hours and through arranged sessions. All interviews were audio recorded, coded and later transcribed and translated from Malay (Brunei’s national language) into English. Every transcript was translated by the researcher and checked for quality by the Acting Director of the Bureau Linguistic and Language, Brunei. Probing questions were also used to assist participants to respond to the questions (Appendix 6). On average, an interview session took about 25 minutes to complete. Overall, a total of 119 respondents, representing a 98% response rate, completed the interview and survey study. Participants responded very well to the set questions, as they were able to relate their experience through the questions.

4.7.2.5 Phase 2 survey questionnaire

The Phase 2 survey questionnaire comprises itemised statement measurements for 11 dominant climatic factors identified from the Phase 1 study. The aim of the final questionnaire was to assess participants’ agreement on the developed itemised statements measuring each dominant climatic factor. These climatic factors were further analysed for their reliability and validity. Item wordings that form the questionnaire content were
clearly understood by the participants. A total of 665 respondents, representing an 86% response rate, participated in the final survey.

A draft questionnaire has to be pretested before it can be administered in order to avoid any shortcomings and ensure a meaningful analysis of the evidence obtained in the design and administration of the questionnaire (Emory & Cooper, 1991). Data collected is analysed using statistical model analysis. Quantitative measures comprise variables measured at the interval or ratio level. Where questionnaires are structured for attitudinal questions, following general and specific questions, single and multiple items using the Likert scale are used to measure the construct. Likert-type scales can range between strongly disagree (1) to strongly agree (5). The dependent variable of readiness for improvement was measured along three dimensions: (1) emotional readiness for improvement, (2) intentional readiness for improvement, and (3) cognitive readiness for improvement (Piderit, 2000). Eleven dominant factors believed to be potential factors contributing to an organisational climate for readiness served as the independent variables.

The itemised measurement statements measuring each independent variable were selected from the literature, their reliability and validity having been tested from previous research. For example: trust in top management (3 items) taken from Albrecht and Travaglioni (2003) and Kim and Mauborgne (1993); participation (5 items) taken from Lines (2004) and Waneous et al. (2000); communication (6 items) taken from Miller et al. (1994); and top management support (5 items) taken from Lines (2004) and Waneous et al. (2000) (cited from Bouckenooghe, 2008). Others include self-efficacy and self-valence (6 items) and group efficacy (4 items), the itemised scale taken from the readiness climate tool developed by Holt et al. (2007); Clear task roles and responsibilities (3 items), clear expectations and direction from top management (2 items) and top management's trust in subordinates were developed from the interview feedback. Job knowledge (2 items) were taken from Madsen et al. (2006) and trust in peers (5 items) was taken from Cook et al. (1981), cited in Rafferty and Simons (2006). The readiness factors represented dependent variables such as the readiness for improvement with item scales on a multidimensional level, namely readiness (emotional – 3 items; intentional – 3 items; and cognitive – 2
items), and were taken from Metselaar (1997) and Oreg (2006) (cited in Bouckenooghe, 2008).

4.7.2.6 Pilot study
In the Phase 1 study, the draft questionnaires were reviewed by a panel of organisational experts and selected participants from the organisation comprising ten people to further refine an agreed format and questionnaire wording. Once completed, a pilot study was conducted to ensure the smooth conduct of the actual survey and interview sessions. The actual interview sessions proceeded immediately after the pilot study. There were no changes in the format of the interview contents. A list of the participants, who are coded with their designator post and interview time, can be found in Appendix 3. In the final study, a pilot study involving 50 employees ranging from top managers, senior managers and non-managers was conducted to indicate the reliability of the survey content in terms of the wording and relevancy of the statements. Overall, all the participants in the pilot study understood the questions and agreed to its content and took an average of 25 minutes to complete each questionnaire. The only comment from the participants was that the survey questionnaire was lengthy, but they agreed that it was necessary to incorporate all the itemised independent and dependent variables of climatic factors. The questionnaire consists of 53 statements, with a range of three to five statements per factor. Each questionnaire was coded and the responses were entered into Statistical Package for the Social Science (SPSS) program, version 19.

4.7.2.7 Case studies
To achieve the third objective (explained in Chapter 1, section 1.2) of this study, multiple case studies were undertaken across several departments of the Public Works Department in Brunei. The findings from these case studies are presented and discussed further in Chapters 5, 6 and 7. According to Cavana et al. (2001), a case study approach involves the systematic gathering of in-depth information on a single entity – an individual, a group, an organisation or a community – using a variety of data gathering methods. Case studies can involve the contextual analyses of similar situations in other organisations in which the nature of the problem and the problem definition happen to be the same as the one
experienced in the current situation. This research commenced by highlighting the importance of employees’ readiness attitude for improvements to be effectively and successfully implemented in public service organisations. The underrepresented study of employee readiness in different organisational contexts was the motivation for this study to be conducted in Brunei Darussalam as a case study. Brunei’s absolute monarch-governed organisational context offers a unique case study of understanding the complexity of readiness in complex and adaptive organisations. Readiness research has not been conducted in Brunei’s public service organisations, which are striving to survive against the demands of modernisation through improvement programmes. The protocol for this case study incorporates multiple case studies across four departments of the Public Works Department that have similar operational, functional and organisational structure challenges and improvement programmes to achieving a main objective goal, the nation’s vision. In order to answer the research question through its objectives, a combination of descriptive, exploratory and explanatory type case studies were undertaken. The organisation was taken as the unit of analysis but covered the shared perspective of individual, group and organisational readiness across several departments of a main organisation. A quantitative survey covered hierarchical multilevel employees to achieve a holistic understanding of the interrelating components affecting employee readiness. Both qualitative and quantitative methods were used to achieve the objectives. This study uses a multiple case study approach (Blumberg et al., 2005) involving three departments of the Public Works Department in the Phase 1 study and four departments in the Phase 2 study (Figure 4.2).
Figure 4.2 The multiple case study approach used (Yin, 2003).

For this research, the main sources of evidence for data collection were the semi-structured interviews and questionnaire surveys across four departments in the case studies. The ethical assumptions during the conduct of this study are addressed in section 4.6.3. In this research, due to the limited time frame, a cross-sectional study was used to meet the research objectives and develop the framework.

4.7.3 Resources for the fieldwork

Since the fieldwork was conducted in the researcher’s country, the expenditure for the fieldwork was covered by the Brunei Government. The arrangements to pursue the practicality of this research for the selected departments under study were organised through the Administrative Department of Public Works.

4.7.4 Choice of data sampling method

Sampling methods can be classified into two categories: probability and non-probability sampling (Sekaran, 1992; Schofield, 1996). According to Cavana et al. (2001), for probability sampling, the chances of members of the wider population being selected for
the sample are known. Probability sampling allows generalisation to be made, as it seeks to represent the wider population. Using this method also allows two-tailed tests to be administered in the statistical analysis of quantitative data (Cavana et al., 2001). Examples of probability sampling are simple random sampling, systematic sampling, stratified sampling, cluster sampling, stage sampling and multiphase sampling.

For non-probability sampling, the chances of members of the wider population being selected for the sample are unknown. Every member of the wider population has no equal chance of being included in the sample. Examples of non-probability sampling methods include convenience sampling, quota sampling, dimensional sampling, purposive sampling and snowballing sampling. Each type of sample seeks to represent itself or instances of itself in a similar population rather than attempting to represent the whole undifferentiated population (Cavana et al., 2001). Due to the time and resource constraints, this research uses a sampling method to further investigate the phenomena, as it was not viable to assess the entire coverage of each organisation. A sampling frame was selected to represent the population of an organisation.

A combination of both a probability and non-probability sampling method was used for this study to ensure that the selection of samples for the study represent the population of the organisation and `would contribute effectively to the research’ (Al-Hamar, 2010). The sampling methods used in this research are shown in Table 5.0.
Table 5.0 Sampling methods used in this research.

<table>
<thead>
<tr>
<th>Sampling method used</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>PROBABILITY</strong></td>
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<tr>
<td>Questionnaire and interview survey: Participants were selected following the criterion of ‘public servants’ in public service organisations. Data were collected based on the following sampling methods:</td>
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<tr>
<td><em>Stratified random sampling</em>: The population is divided into homogenous groups, each group containing subjects with similar characteristics, e.g. geographical area, age group, multilevel groups and gender. Using a combination of randomisation and categorisation enables both a quantitative and qualitative study to be conducted; thus, this method is appropriate to be used in this research.</td>
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<tr>
<td><em>Cluster sampling</em>: This method allows for a specific number of organisations and tests all the employees in those selected organisations, i.e. a geographically close cluster is sampled. In this study, the adoption of this method was found to be appropriate, as the population is grouped into clusters according to organisations situated at the main office in one district, multilevel positions and qualifications. The rest of the sampling methods were not considered, as the researcher found it more convenient to sample the whole list of employees in each organisation stationed at the main head office that represent the rest of the sub-office throughout the duration of the field study.</td>
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<tr>
<td><strong>NON PROBABILITY SAMPLING</strong></td>
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<tr>
<td><em>Convenience sampling</em>: To ensure the effectiveness of improvements by identifying the desired climate that promotes employee readiness, samples of populations were chosen according to the participants’ involvement in improvement programmes or being improvement agents. As every member of the organisation has been involved in current improvement programmes, it was more convenient to conduct sampling on the whole list of employees’ stationed at the main head office due to their availability and accessibility at the time of study.</td>
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<tr>
<td><em>Purposive sampling (interviews)</em>: Purposive sampling was found to be appropriate for this study based on the researcher’s judgement, as this study seeks to gain multilevel employees’ perceptions. Multilevel refers to categorizing participants into top managers, middle managers and non-managers as well as</td>
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individual, group and organisation perceptions. As the study focuses on those employees who have experienced and are knowledgeable about improvement programmes, the preferred participants included improvement agents such as top and middle managers and supervisors at every level. Others include frontlines, operators and employees of related improvement functions.

4.8 DATA ANALYSIS

According to Kerlinger (1975, 1986), statistics is the theory and method of analysing quantitative data obtained from a sample of observations. The aim is to study and compare sources of various phenomena, assist in accepting or rejecting the hypothesised relationships between the phenomena and make reliable inferences from empirical observation. For this study, statistical analysis was used to test the hypothesis and the reliability and validity of the findings (Cavana et al., 2001). Factor analysis was conducted further after the principal component analysis (PCA) showed a high inter-correlation between both independent and dependent variables, indicating the need for further factor analysis. A scree test examined for significant factors that explained a lot of variance for which the factors with clean loadings were renamed. The results are further explained in Chapter 6.

4.8.1 Validity of measurement

Validity concerns the question ‘am I measuring what I intend to measure?’ (Nachmias Frankfort & Nachmias, 1996). There are three basic types of validity, each relating to different aspect of measurement situation: content validity, empirical validity and construct validity (Nachmias Frankfort & Nachmias, 1996; Tashakkori & Teddlie, 1998). For content validity in this study, a qualitative method was used to triangulate and validate the quantitative findings. This study covers almost all of the improvement agents over a large population sample across four organisations, thus increasing the sampling validity.

According to Nachmias Frankfort and Nachmias (1996), empirical validity is concerned with the relationship between a measuring instrument and the measurement outcomes. Predictive validity, most widely used, is the degree of correlation (correlation coefficient)
between the results of a given measurement and an external criterion. Computing correlation coefficients between two sets of measurement determines the validity coefficient. For this study, the Pearson-product moment correlation coefficient, the most commonly used method of computing a correlation between variables that are linearly related, was used. The Pearson-product moment correlation is used to confirm a positive relationship between identified climatic factors with the employee readiness factor at the multidimensional level. The consistency of the empirical evidence was supported by a subjective comparison of the qualitative data (Tashakkori & Teddlie, 1998). According to Remenyi et al. (1998), construct validity can be determined by relating the measuring instrument to a general theoretical framework. In the development of the survey questionnaire for this study, the construct and content validity were determined from the results of the literature review and further validated empirically.

### 4.8.2 Reliability of measurement

According to Tashakkori and Teddlie (1998), reliability is the degree to which the result of a measurement accurately represents the true magnitude or quality of a construct. In evaluating the reliability, two assumptions need to be considered. Firstly, a parallel test with a second observer, involving repeated tests using the same method of measurement. This resembles a triangulation type measurement with two or more identical methods in the same group or situation, or with the same method on more than one occasion. The second assumption is that any errors that represent the ‘true’ magnitude of the attribute will cancel each other out over repeated measurements. Methods of determining measurement reliability are applicable to both quantitative and qualitative research. In evaluating the reliability of results, a parallel test was conducted during the pilot study using the same group of participants. The participants could allocate only limited time for the study due to the demands of their work. Further reliability of the results was tested with Cronbach’s coefficient alpha (Tashakkori & Teddlie, 1998). Triangulation between the statistical results, the literature findings and the qualitative results further enhance the reliability and validity of the results.
4.9 BACKGROUND OF THE STUDIED CONTEXT – BRUNEI DARUSSALAM

4.9.1 Introduction

The background of the Brunei context focussing on the civil service and the Ministry of Development and Public Works Department provides a glimpse of the current issues, challenges and means of adapting to a way forward in achieving the nation’s vision. Understanding conduciveness for employee readiness to survive the challenges in the complexity of Brunei’s organisational context provides the generalisation of this understanding to other settings by other case study users. This research context provides the basis on which the research questions were formulated for investigation.

4.9.2 Brunei’s background

Brunei Darussalam is a Malay, Islamic Monarchy and an independent sovereign Sultanate governed on the basis of a written constitution. Brunei Darussalam is a small developed country (5,675 sq. kilometres), and its capital Bandar Seri Begawan is situated on the north-west coast of the island of Borneo.

Figure 4.3: Map of Brunei Darussalam
Source: Prime Minister’s Office website (PMO, 2012)
Politically and economically stable from oil and gas revenue, Brunei Darussalam’s small population of 393,400 people (Department of Economic, Planning and Development, 2011) enjoys one of the highest standards of living in Asia.

Brunei Darussalam, whose public organisations are governed under absolute ‘monarchy’ regime can be compared to some Middle East countries like Qatar and Bahrain. The similarities of economic, financial and social stability being dependent on oil and gas revenues and being an Islamic country between Brunei and the Middle East countries may portray similar organisational challenges in the public sector. Similarly, countries like Cambodia, Malaysia and Thailand which runs on constitutional monarchy may face similar challenges in their public sector. The significance from the findings of this study may provide further insights and understanding on the complexity of employees’ readiness in a closely network hierarchical monarch organisational context. The findings from this study can be applied if not compared to the above cases to see if the range of climatic factors portrays similar patterns.

4.9.3 Brunei Darussalam’s administration

The political administrative system and the structure of government of His Majesty the Sultan and Yang Di-Pertuan of Brunei Darussalam rest on the country’s constitution and modern bureaucratic principles. Currently, His Majesty the 29th Sultan of Brunei is Head of State and Head of Government, Prime Minister, Minister of Defence and Minister of Finance. He is advised by five constitutional bodies: the Council of Cabinet Ministers, the Legislative Council, the Privy Council and the Religious Council. The Prime Minister’s Office also acts as the central agency in the management and administration of the government and the civil service (Brunei Resources, 2005). There are 12 ministries and 113 departments, all striving in a united effort to ensure the well-being and welfare of the people through its development programmes and projects covering economic, social, education, health, religious, infrastructure development, services and administrative concerns (see Figure 4.4).
Brunei Darusslam’s absolute monarch governance has been argued to be adaptable and flexible to the demands of modernisation (Talib, 2002; Thambipillai, 2011), and thus makes a unique case for studying employee readiness in a complex and adaptive organisation. The outcome of the study will extend the current knowledge on the understanding of the readiness concept in different political and organisational contexts.

### 4.9.4 National Vision 2035

To ensure the sustainability of Brunei Darussalam’s future, Brunei’s National Vision 2035 aims for a high level of educated and skilled people, good quality of life and a dynamic sustainable economy. The National Vision comprises eight major strategies upheld by the core values of the Malay Islamic Monarchy concept. The strategies driven by investment under the National Development Plan for all ministries and departments in the civil service covers education, the economy, security, institutional development, local business development, infrastructure development, social security and environment strategy (Brunei Times, 2009).

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Figure 4.4 Brunei’s government organisation.
4.9.5 Brunei’s civil service

Brunei’s civil service is the largest employer in the country, employing 40,000 people of which 47% are female. The civil service plays a role as the government’s engine and uphold the supreme authority of His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam and the National philosophy – MIB, the Malay Islam Monarchy. In addressing emerging challenges, Brunei’s civil service is geared towards new ways of management that are pacesetting and facilitate national development (Brunei’s Country Report, 2005). However, in the alignment of strategic improvement plans among public service organisations with the civil service vision to meet the National Vision 2035, preparing the mindset of public servants to adapt is difficult and unclear.

4.9.6 Challenges faced by Brunei’s civil service

Brunei Darussalam is no exception in that it is vulnerable to the emerging economic, financial, social, technical and environmental challenges caused by internal and external pressures. Economically, being too dependent on oil and gas, Brunei’s economy is vulnerable to external shocks, thus upgrading the economy remains a major task. Financially, Brunei Darussalam has been affected by the Asian Financial crisis, which has prompted the government to cut back its spending on development programmes. Thus, improving the efficiency and effectiveness of the civil service is the main agenda. Socially, public expectations for a higher standard of services and accountability have increased as a result of the citizen becoming increasingly educated and exposed to the advancement of information technology and the outside world. Environmentally, irregular patterns in climate change cause major service disruptions such as power cuts, water, road and drainage problems due to landslides, flooding and prolonged droughts. Globally, the government has to survive and sustain the uncertainties of economic, political and national development influenced by the fast pace of information communication technology advancement. The challenge for the civil service is for public service organisations to be responsive and adaptive to the challenges and meet customers’ expectations in a creative and innovative way (Brunei’s Country Paper, 2005).
4.9.7 A new direction for the civil service

In meeting the challenges of the 21st century, Brunei’s civil service has shifted from being ‘Law and Order’ orientated to being a pacesetter and facilitator for national development. Strategies and improvement plans are geared to align the civil service vision of the 21st century with the National Vision 2035. To transform public service organisations into a corporate culture in addressing the emerging challenges and in accordance with Islamic principles, acquiring the right mindset and attitude of public servants remains a challenge for top management (Brunei’s Country Paper, 2005).

4.9.8 Improvement initiatives in the Civil Service

In line with the Prime Minister’s Office strategic plan on ‘Modernising the Civil Service’ to ensure efficiency and effectiveness, efforts in inculcating a positive mindset and culture are reflected in the organisation’s strategic plan under Learning and Growth (Figure 4.5). Improvement efforts are also emphasised on strengthening professionalism, leadership skills, attitude, knowledge and skills for service excellence. Civil service counselling also provides a strategic support system for the welfare of civil servants and enables the well-being of all employees to be maintained (Brunei’s Country Paper, 2007). With all the alignment of plans, strategies and improvement initiatives in place, the civil service vision will only be realised with the full support and readiness of the public servants in the ministries and departments to support and achieve improvements. As emphasised by His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam in his ‘titahs’, or royal speech, on the 17th Civil Service Day, 2010:

‘Whatever programmes in improving public service, whether it is the strategic plan or ongoing improvement plans, it is important to ensure all fundamental elements are made a priority and should not be neglected … Among the elements are attendance, commitment, dedication, discipline and integrity. If these elements are not present in the public sector or are not strong enough, whatever programmes we are going to do in innovation management and technology will not produce the results that we want’

(Brunet Times, 2012)
Positive employee readiness to support improvements is crucial if public services are to survive in the new era (Tan, 1997). In preparing public servants’ readiness to cope with the challenges, understanding what factors and the means to promote employee’ readiness to support public service improvements remains a challenging management inquiry. This study aims to contribute to this management inquiry.

Figure 4.5 Prime Minister’s Office strategic plan (Brunei Resources, 2004).
4.9.9 Ministry of Development strategic plan

The Ministry of Development (MOD) is one of the leading agencies as a technical and professional organisation that holds responsibility for the physical national development and growth. The scope of responsibility encompasses infrastructure development, national housing, the environment, land use and the construction industry. Through its various departments and units, the Ministry of Development relies on the readiness of its workforce to deliver its services and operates by its motto ‘Bersedia Berkhidmat’, meaning ‘Ready to serve’. In moving forward with the Ministry of Development’s strategic plan 2009–2015, which will drive the Ministry’s vision of Quality Living-Sustainable Development-Prosperous Nation, more new management approaches and construction technologies are being introduced, away from the traditional approaches. However, incorporating new mindset and establishing realistic measures of assessing employee readiness with improvement plans remains a challenge and needs investigation (see Figure 4.6).
Referring to Figure 4.7, there are six departments that function under the Ministry of Development: the Public Works Department, the Land Department, the Survey Department, the Housing Development Department, the Town and Country Planning Department and the Environment, Parks and Recreation Department (Ministry of Development website, 2009).
Figure 4.7 Organisational chart of the Ministry of Development.

In the Public Works Department, relevant departments such as Water Services, Building, Road, Drainage and Sewerage as well as the Technical Services Department play an important role as the catalyst for delivering PWD’s mission ‘To develop a comprehensive infrastructure, buildings and services for nation building towards quality living’ (Public Works Department official website, 2012). Due to the complexity of strategy development, it is essential that efforts do not result in a paper exercise but are geared to achieve the right level of employee readiness to support improvements. Thus, there is a need for this research to be conducted with a larger coverage incorporating multilevel and multidimensional perspectives of employee readiness.
4.9.10 Public Works Department

The Public Works Department, under the Ministry of Development, is responsible for the implementation of public works and projects involving planning, design, construction and maintenance of the following public facilities and structures:

a. public roads, bridges, airports, infrastructure
b. government office buildings, low-cost housing schemes, government quarters and mosques
c. coastal protection works and water supplies
d. drainage and sewerage works.

The core values of the organisational culture in the Public Works Department are:

- Visionary leadership (dynamic thinking)
- Uphold integrity, accountability, responsibility and productivity
- Teamwork
- Professionalism
- Resilience and Responsiveness

In achieving the above vision and mission, the Public Works Department has set its main objectives in three main areas:

- Build capabilities within PWD to support an efficient and competent construction industry
- Enhance our quality to be the organisation of 1st choice
- Inculcate an organisational culture towards sustainable development

(Public Works Department website, 2012)

The above objectives, in particular the third objective, enforced by the core values set by the Public Works Department, reflect the strong need for a positive and adaptable workforce. However, in response to His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam’s call for key performance indicators to be set in each organisation, existing measurement tools for employees’ readiness in absolute monarch context is
underrepresented if non-existent. The need to extend the underdeveloped knowledge on readiness in complex and adaptive organisation is what motivates for this study to be conducted. As His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam emphasised in his 64th birthday royal speech:

‘Through this methodology, we are able to measure to what extent can the public service carry out its responsibilities in meeting the demands of this country and the public’

(Brunei/Asia News Network, 2010)

Four departments in the Public Works Department have been selected for this study on the basis of their having a similar organisational role, administrative and operating functions, similar experience of improvement initiatives (planned and unplanned) to survive challenges and administrative changes. Planned improvements include ISO 9001:2000 implementation, technology advancement, operation and maintenance improvement. Unplanned improvements include improvements to aid survival in climatic challenges, i.e. drought, flooding and landslides affecting infrastructure and utilities, administrative changes, i.e. reshuffling top and middle managers affecting organisations under the Public Works Department, and unplanned decisions from top management.

4.9.10.1 The Water Services Department as Case Study 1

The Water Services Department (DWS), Public Works, Ministry of Development, is the nation’s largest water utility, delivering a safe continuous water supply to the whole country. The Water Services Department is also responsible in the planning, design and management of the country’s water resources to ensure they are adequate and sustainable for current and future usage. Through the government’s continuous investment under the National Development Plan, a total of 463 million litres per day (MLD) are currently served to 99.9% of the whole population of Brunei (Public Works Department website, 2012). Although development of the water supply has reached its population target coverage, there is still a need to reach an acceptable service level in the perception of customer’s expectations and satisfaction. In gearing its effort to become aligned with the National strategies and achieve the National Vision 2035, the Water Services Department
has undergone transformational activities towards a more corporatised customer-oriented utility since 2005.

With the implementation of improvements in administrative, technology, operational, financial and information technology advancement concerns, the biggest challenge in relation to the current improvements is the competency of the supporting resources to sustain the improvements. In order to realise the Department’s vision, WATER for ALL, establishing the right benchmarks to inculcate positive employee readiness within the organisation as part of the Department’s strategic plan remains a challenge. Only when the organisation is able to cultivate the readiness of a positive, adaptable workforce will the strategic objectives be realised effectively. The Water Services Department also forms part of the National Disaster Committee in ensuring continuous water supply in the event of a national crisis or natural disasters (Razak, 2009).

4.9.10.2 The Road Department as Case Study 2

The Road Department is the largest authority responsible for providing and maintaining road services such as new roads, highways, slip roads, junctions, roundabouts, bridges and flyovers that meet public expectations. It is also responsible for access to rural communities and also the capacity improvement of existing roads for safe and uninterrupted traffic flow. Due to the relatively small size and population of the country, the government still finds it manageable to utilise its own resources in public road development and maintenance without the need for private initiatives. Under the current National Development Plan, improvements are geared towards the planning and development of road networks throughout the country including maintenance. Improvements are also being made to rural areas, particularly within flood-prone areas, and upgrading of the road infrastructure in the capital. An improvement that goes hand in hand with this is the road safety awareness programme (Oxford Business Group, The Report: Brunei Darussalam, 2009). The Road Department also forms part of the National Disaster Committee in facilitating repair works following landslides, flash floods or other natural disasters. In the move towards modernised ways of management, one of the current improvement initiatives is the introduction of a road asset management system. This is
meant to improve and enhance current practice by providing ‘best practice’ and ‘best value’ approaches to road asset management in Brunei.

However, the challenge for the Department in succeeding among other improvement initiatives is the shifting of the mindset from the ‘traditional’ ways of management to the ‘modern’ ways of management involved in asset management. Together with other management improvements, improvement success will only be achieved through employee readiness and support, which remains an ongoing challenge (Razak, 2009).

4.9.10.3 The Drainage and Sewerage Department as Case Study 3

The Drainage and Sewerage Department in the Public Works Department is the largest utility, responsible for a wide range of drainage and sewerage services in the country. Their vision is to ensure clean, sustainable rivers and a stable coastline. The Department’s mission is to continuously improve sewerage, drainage and coastal infrastructure and service to ensure high quality living. The Department is also responsible for ensuring an effective, clean and safe sewerage system. Currently, 44% of development of the centralised sewerage system covers an estimated 90% of the population through 750 km of sewerage pipes. As challenges increasingly becoming complex, the Department of Drainage and Sewerage strives to survive and maintain infrastructure development with strategic improvement programmes.

The Drainage and Sewerage Department in Public Works Department has set a specific goal of 5% sewer connection with every national development plan or every five years with a strategic plan of having greater access to a high quality sewerage system. The strategic plan is in line with millennium development goal (MDG) 7 to ensure environmental sustainability (Brunei Times, 2010 – Moving towards flood free Brunei). With improvements set under the National Development Plan and Department strategies to cope with public demands, success will only be seen through employees’ readiness to support those improvements.
The Technical Services Department as Case Study 4

The Technical Services Department in the Public Service Department is responsible for building in-house projects. Their scope of expertise revolves around the architectural, project management and design services of government buildings in the country. Their vision is to provide professional technical services of distinction and their mission is to deliver projects and services professionally, on time and satisfactorily. To achieve the vision and deliver their mission, the Department aims to provide professional and technical services of distinction to ensure excellence in the implementation and management of projects. These are in the areas of architectural, structural, mechanical and electrical engineering, quantity surveying, geotechnical and geology as well as construction materials testing. As the challenges increasingly becoming complex, the Department strategises by improving their human resource management, improving the image of the Department, improving integration and coordination with their clients, updating their procedures and work routines and inculcating the spirit of teamwork. However, developing employees’ readiness for improvements to succeed remains a challenge. (Public Works Department official website, 2011).

4.10 TOWARDS EFFECTIVE IMPROVEMENTS IN PUBLIC WORKS DEPARTMENT: AN EXAMPLE OF A CASE STUDY OF WATER SERVICES DEPARTMENT

In meeting the demands of modernisation for improved government performance, the alignment of strategies and goals were cascaded down among ministries and departments. Improvements efforts were aimed in transforming government agencies into a corporate culture to meet the Civil Service vision for the 21st century and achieve the Nation’s vision 2035. Major reshuffling of Ministers among Ministries in the year 2010 affected the Ministry of Development and in turn involved reshuffling and new appointments of permanent secretaries, the Director General of Public Works, directors, assistant directors, senior managers and engineers within the Departments under Public Works. The Departments include Water Services Department, Road Department, Technical Services, Drainage and Sewerage Department. With new managers, new thinking and direction associated with improvement plans were initiated. The new direction was aimed for a
future state of excellence in service delivery in the eyes of the public. There was a need to strengthen Public Works as a Technical Authority that is dynamic, credible, innovative and transparent. As stated by one of the top manager:

`We need to strengthen ourselves as a Technical Authority. That means we need to be credible. That's very, very important. So, I feel, we need to do more R and D function, which we don’t do much R and D now, actually. As a Technical Authority, we need to strengthen ourselves, in terms of expertise and professionally. Then, secondly, probably in the future we become innovators.’ (P1.OC1)

The requirement for new positive mindset and culture was strategized as one of the main objectives of Public Works Department and integrated in each Department’s performance benchmark. However, the challenge of setting clear strategic goals and indicators is still unclear and inconclusive. The challenge of implementing planned improvements becomes more complex with the unpredictability of unplanned events such as flooding, landslides, technical difficulties, major power failures, major service disruption caused by site conditions and weather fluctuations. Thus, creating a measurement that allows flexibility and incorporate the readiness of employees to adapt is necessary to counter the constant state of flux. As stated by one of the top managers and participant:

`We do have the developed Key Performance Indicators (KPI), but I know that at present, the issue now is that it’s only on paper. I don’t believe any organisation even at present, we are doing more than that. We need something to measure ourselves, something real.’ (P1.OC.1)

`Yes, readiness is actually helping the staff understand that they are being listen to and that there’s improvements coming and that they being involved in the process earlier on. So this assessment tool is actually part of an awareness tool and if I have a benchmark tool like this readiness assessment tool, it would be useful because it would help us to engage them and it also gives us a benchmark that would sell the success of the project that would help people be sure of it and become advocates for it.’ (P1.A119)
To improve the quality of service and upgrade Public Works’ image, all Departments under Public Works took several measures to improve the existing procedures and systems, enhance operational technology and information technology to strengthen information, administrative and service delivery. Each improvement effort can be seen as a product of environmental factors (influenced by economic, societal demands and climate change) and the developmental of policies and objectives of each Department. Under planned improvements, similar improvement initiatives within the Departments under Public Works, revolves around improved productivity and delivery services. Examples of improvement initiatives include achieving ISO 9001:2000, asset and maintenance management enhancement using latest technology and information technology advancement (ie GIS, Maximo and GT system). Improved customer service level is enhanced through refinements of procedures and simplified version of application and payments. The service performance is monitored through a Client’s charter and performance benchmarking. However, in combating with the complexities and instabilities of planned improvements, the Departments faced complex challenges of unplanned improvement in response to flooding, landslides, long dry spells influenced by irregular weather patterns. Major power failure, disruption of services such as water, road, drainage and sewerage affecting the public lead to a unity of joint improvement efforts under the National disaster management committee taskforce involving majority of employees within the Departments under Public Works. Thus, responses to interview sessions conducted in this study reflected majority of employees’ perception as an individual and as a group member. The sampling population represent an ideal case of studying a multilevel perspective of employees’ readiness. Due to the urgency and the need to survive, employees under Public Works Department have learnt to adapt through a conducive climate that emerged from the chaotic situation, where the level of receptivity and involvement are higher. This study intends to identify the emerging conducive climatic factors that affect their readiness based on the experience and perspective of employees whom have survived with improvement success.
Similarly, Water Services Department have journeyed both planned and unplanned improvements with success that earned a gold (customer delivery) and silver award (financial) at the National Civil Service Excellence Award 2008 and arrived at the final filtered stage of selection for the United Nation Public Service award the following year. Improvement efforts that led to the transformation focussed in the following areas:

(a) Structural improvement – A horizontal structure of organisation chart was adopted for more accountability and clearer task roles and responsibilities. Additional units were introduced to enhance monitoring of performance and customer added value.

(b) Legislative, policies and procedures – Outdated legislative acts, policies and procedures were reviewed and revised to suit current conditions. Achieving ISO 9001:2000 and ISO 17025 allowed for administrative, customer-related, operational and quality assurance procedures for water supply to be refined and simplified for faster action.

(c) Improved productivity and delivery services - The creation of Operation Control Centre unit enhance the monitoring and attendance to customer complaints which included complaints received related to other Departments such as Road, Drainage and Sewerage. The unit is supported by the latest monitoring technology and information technology advancement which provided the needed access of information to speed maintenance work and billing (ie Geographic Information System (GIS), E-billing integrated system and Maximo system). Extra effort was also focussed on frontlines and operators to ensure their positive and quality response and presentation to customers. Internal and external customer client’s charter was enhanced towards the alignment of improvement initiatives aimed at meeting customer’s expectation and satisfaction. Operational technology was upgraded for optimised performance and integration of information technology was aimed towards e-payment and e-billing. Improvement efforts were geared towards water conservation and reduction of non-revenue for water, which involved public participation. Outsourcing of maintenance work was given to private sectors for improved speed of service recovery. A new water laboratory with an additional range of monitoring indicators aimed at improving the level of water quality monitoring.
(d) Improved performance measurement, monitoring and reporting – A blueprint of strategic roadmap and balanced scorecard with strategized benchmarks were developed. However, these benchmarks are improvised as the organisation self-organises and evolves towards better service performance.

(e) Attitude and behavioural change – The need to transform into an adaptive workforce in alignment to new ways of management requires the readiness and change of mindset of employees. The benchmarks or indicators needed to transform into a positive, adaptive culture are still unclear and forms the biggest challenge as attitude reflects the highest frequency of constraints to improvement success in this study. As two participants highlighted:

`Yes, some failed due to lack of readiness of staffs in terms of well equipped. The consultant also relies totally on us so we feel that we are the consultant sometimes. Meaning it’s not tailored. The expertise is not shown in our perspective.’ (P1.A37)

`Like I said, it still comes back to the work attitude, having the right mindset in relation to our readiness. To me, you have to accept the work by knowing your responsibility, the trust in you that increases your self confidence.’ (P1.B69)

Further efforts were focussed into tailored approaches by involving more participation from employees’ perspective of what works, particularly under unplanned improvements. Positive performance results started to emerge in particular during unplanned improvement as employees’ ideas and voices were taken into consideration. As some participants recall:

`For me, this chaos represents a great opportunity to me and my people because when it comes to chaos, nobody dare challenges us on cost, in terms of how we do it, the methodology. So whatever we need to do to upgrade the system, this would be the best time to include, even when we pushed for a high cost, the top will tend to support us. We pushed all the design criteria’s to suit our needs and nobody cares how we design it as
Creating the right readiness by recognising and facilitating the right conducive climate is crucial for improvement success. Water Services Department has successfully survived the difficulties and complexity of improvement process by inculcating an adaptive workforce focussing on the requirements of employees of what they need to make improvements work. Results from interviewed session in this study identified both essential and influential climatic factors indicating that employees’ readiness can be stimulated and developed. The results were based from past improvement success and employees’ perception of the desired climate that affects their readiness for effective improvements. Further details of the range of climatic factors can be referred in Chapter 5.

4.11 CHAPTER SUMMARY

This chapter has described the adopted research methodologies for this study, starting from the adoption of appropriate philosophy, research approach and strategy in order to achieve the objectives and answer the research question. In addition, a detailed description of the appropriate data collection methods adopted for this study is presented. The next chapter presents the findings of the data evidence and results of the analysis, indicating the desired climatic factors needed to promote employee readiness for effective improvements.
CHAPTER 5 – PHASE 1 STUDY (DATA PRESENTATION, ANALYSIS AND RESULTS)

5.0 CHAPTER OVERVIEW
The study consists of two phases, Phase 1 and Phase 2. This chapter presents the data collected in Phase 1 and the analysis and findings from that data. Phase 1 involved an exploratory study, with 119 interviews and a survey conducted simultaneously. The aim was to identify the dominant essential and influential climatic factors that are capable of triggering and influencing employees’ readiness to support improvements. The chapter structure is outlined in Figure 5.0.

5.1 CHAPTER INTRODUCTION
This chapter reports the Phase 1 study, which was designed from the findings of literature review, to further explore the desired climatic factors as perceived by civil servants in Brunei. According to Patton (2002), in qualitative approaches, the research takes place in its true setting and the researcher does not attempt to manipulate the phenomenon of interest. Thus, this approach allows the pilot study and Phase 1 study to be directed to the research participants. The triangulation of qualitative and quantitative data will result in the identification of specific climatic factors, which can be further developed in the Phase 2 study. Other relevant findings leading to the framework of the study are also discussed. The adoption of a qualitative method allows access to a rich source of data for further insight into understanding the complexity of employee readiness in the Brunei context. With reference to Figure 5.0, the following section describes the Phase 1 study process.
Figure 5.0 Structure of Chapter 5.
5.2 PHASE 1 QUANTITATIVE STUDY

The main aim of the Phase 1 quantitative study was to identify the range of essential and influential climatic factors that employees perceive trigger and influence their readiness to support improvements. The Phase 1 quantitative survey study was conducted over six months from January to June 2011 using printed questionnaires (see Appendix 1). The survey was conducted across three departments in the Public Works Department, namely the Water Services Department, the Road Department and the Drainage and Sewerage Department. The departments were selected based on the nature of the service operation, organisational structure, the similar improvements being made and the nature of the challenges faced. The Phase 1 survey questionnaire is made up of two sections and the respondents were offered the choice of receiving the questionnaire in either the English or Malay (the National language) version.

1. Section 1 seeks the personal background of the respondent.
2. Section 2 consists of two parts:
   Part 1 seeks the influential climatic factors that affect the participants’ readiness to support planned and unplanned improvements.
   Part 2 seeks the most essential climatic factors (a maximum of ten factors) in that without these essential climatic factors, employee readiness cannot be achieved to support planned and unplanned improvements.

Participants were also given the choice of adding any additional climatic factors not included in the list. An information sheet was given to the participants informing them of the purpose of the questionnaire and the participants’ role in the study prior to conducting the study. The questionnaire was pilot tested on a target population of 20 participants who were improvement agents ranging from senior water engineers, district water engineers, engineers, chief technical assistants and technical assistants. The questionnaire was available in both a Malay and English version; the Malay translation was checked by the representative of the Bureau Linguistic and Language Department, Brunei. The contents of the questionnaire were clearly understood by all the participants, hence no modification was required.
The questionnaire was tested and found agreeable in terms of its wording, the availability of choice of language and its clarity. Thus, the questionnaire contents were found to be validated, reliable, applicable and justifiable based on the perception of the participants. The sample included multilevel improvement agents ranging from top managers, middle managers and non-managers. Due to Brunei’s small population, 96% of the respondents multitask within the organisation and represented themselves as individual and a taskforce members on a national level. Thus, the employees present the ideal candidates for individual, group and organisational perspectives.

As the majority of the employees were involved in planned and unplanned improvements and were eager to participate, it was convenient to capture the whole list of administrative levels of improvement agents for the study. The participants ranged from directors, senior managers, engineers to technical assistants stationed at the main office in the three departments. All three departments are located close to each other, making it convenient to conduct the study. However, due to the constraint of time and availability, it was more convenient to conduct ad hoc face-to-face surveys and interviews simultaneously. Of the 121 improvement agents in the three departments, 119 completed the survey questionnaire, a 98% response rate. This evidence is more than adequate to represent a good sample.

5.3 DATA GATHERING OF PHASE 1
Coded data were gathered from participants directly and some from the focal person allocated for each department. Data was stored using Statistical Package for the Social Science (SPSS) software version 19. The data were then analysed statistically and systematically. The data were recorded for different categories including demographic information and summarised using frequency and percentage distributions. The research evidence gathered was categorised into five sections:

1. Participants’ choice from the list of essential desired climatic factors in planned improvement.
2. Participants’ choice from the list of essential desired climatic factors in unplanned improvement.
3. Participant’s choice from the list of influential desired climatic factors in planned improvement.

4. Participant’s choice from the list of influential climatic factors in unplanned improvement.

5. Participant’s choice of additional climatic factors not included in the list that they feel are important in triggering (essential climatic factors) and influencing (influential climatic factors) their readiness to support improvements.

Hard copy data evidence was stored in a safe location in the Water Services Department, Brunei.

5.4 PRESENTATION OF PHASE 1 RESULTS (QUANTITATIVE)

Of the 121 questionnaires distributed across the three organisations, 119 were completed and returned, providing an overall response rate of 98%. The responses rate from each department can be seen in Table 6.0.

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>TOTAL SAMPLE</th>
<th>RESPONSE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Services Department</td>
<td>38</td>
<td>100%</td>
</tr>
<tr>
<td>Road Department</td>
<td>43</td>
<td>98%</td>
</tr>
<tr>
<td>Drainage and Sewerage Department</td>
<td>38</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL (Total: 121)</td>
<td>119</td>
<td>98%</td>
</tr>
</tbody>
</table>

The sample comprised top managers, middle managers and non-managers up to technical assistant level (improvement agents). The following sections present the results of the demographic data and survey.

5.4.1 Demographic data

Demographic details were obtained to identify the distribution of the employees’ background. The results are summarised in the next sections.
5.4.1.1 Gender
Out of the 119 participants, 69% were males and 31% were females, all playing the role of improvement agents. It is speculated that there are no gender issues within the Public Works Department; some of the higher posts, including the Deputy Director General and Assistant Directors, are held by females. Increased opportunities that allow for women participation in Brunei’s economic development growth has contributed positively to the national development growth. Further explanation can be referred in Chapter 6, section 6.4.1.

5.4.1.2 Involvement in taskforce groups
Of the 119 respondents, 96% of the multitasked participants are currently involved in task group committees within the department, with other departments and on a national level (National Disaster Taskforce Committee) and play a major role as improvement agents.

5.4.1.3 Age
Of the 119 respondents, 64% were middle-aged (26–45), 15% were between 51 and 60 and 19% were aged between 46 and 50. Only 2% were aged between 18 and 25. Figure 5.1a shows the distribution of age frequency among respondents.

Figure 5.1a Distribution of age group among respondents
5.4.1.4 Qualifications

Of 119 respondents, only 40% hold higher qualifications (24% have a first degree, 16% have a master’s degree), which qualifies them as future managers and improvement agents. Of the participants, 41% hold diplomas and are chief technical assistants, and 19% hold qualifications lower than diploma level. Figure 5.1b shows the distribution of qualification level among respondents.

![Distribution of qualification level among respondents](image)

5.4.1.5 Positions held

Of the 119 participants in the three departments, 5% are top managers, 79% are middle managers (senior executive engineer, executive engineer, engineer, chief technical assistant) and 16% are non-managers (senior technical assistant). Figure 5.1c shows the distribution of position level among respondents.
5.4.1.6 Service

Of the 119 participants in the three departments, 64% are more experienced (have been in service for more than ten years) and 36% are acquiring knowledge and experience through ‘on-the-job’ training (21% have been in service for between five and ten years; 15% have been in service for less than five years). Figure 5.1d shows the distribution of service age among respondents.
5.4.1.7 Current position
Of the 119 participants in the three departments, 22% have been in their current position for more than ten years (older group), 77% are learning and adapting to their new responsibilities and some have gained confidence through their experience on the job (38% of the participants have been in their current position for less than five years; 39% have been in their current position between five and ten years). Figure 5.1e shows the distribution of current position service age among respondents.

![Distribution of current position service age among respondents](image)

5.4.1.8 Frequency of planned improvement
Of the 119 participants in the three departments, 80% have experienced planned improvement two to five times in a year, 20% have experienced less frequent improvements, less than twice a year, and 2% had experienced no improvements in the last year. The type of improvements range from ISO standardisation, upgrading of IT technology, improvements in procedures and project-based initiatives. The frequency of improvements may reflect the response of the departments to a new direction set by the newly appointed top managers, thus explaining the high expectation of top managers for employee readiness to support and succeed in these improvements. Figure 5.1f shows the distribution of planned improvement frequency in a year.
Figure 5.1f Distribution of planned improvement frequency in a year.

5.4.1.9 Frequency of unplanned improvement

Of the 119 participants in the three departments, 4% felt that they have not experienced unplanned improvement in the last year, 24% had experienced unplanned improvement less than twice, 37% had experienced unplanned improvement two to five times and 35% had experienced unplanned improvement more than five times. The unplanned improvements range from reshuffling top and middle managers, loss of staff due to them being promoted or transferred to other units or departments. Unplanned crises were also experienced from natural disasters such as flooding and landslides, and major disruption caused by power failure. Others include technical difficulties on project sites and during service operation and abrupt decision-making by higher authorities. Thus, the increased occurrence of unplanned events or improvements forms the ideal study field context for complexity. Figure 5.1g shows the distribution of unplanned improvement frequency.
5.4.1.10 Readiness to support improvements

Of the 119 participants in the three departments, 95% felt that they are ready to support improvement; just 1% felt that they are not ready and 4% were not sure of their readiness due to their lack of experience and knowledge in their new job in the organisation. Figure 5.1h shows the distribution of readiness level among respondents.
5.4.2 Influential climatic factors under planned and unplanned improvement

Figures 5.2a and 5.2b below show the frequency graph of the distribution of the participants’ choice of the influential climatic factors in planned and unplanned improvement. The majority of the selected range of climatic factors was perceived as equally influential for both planned and unplanned improvement except for job demand. Job demand was selected by 57% of the participants for planned improvement and by 49% in unplanned improvement. The reason for this is speculated from the interview results to be that the existing level of employee readiness lies mainly on the employees’ obedience and sense of responsibility to their monarch and religion. Brunei Darussalam whose governed runs on absolute ‘monarch’ rule, guided by the philosophy of ‘Malay Islamic Monarch’, reflects a just caring rule of keeping human rights and public’s concern’s in relation to the quality of life at the forefront. It is speculated that the feeling of obedience and sense of responsibility is the driving factor to employees’ readiness to believe in the need for improvements for the benefits of the public and to commit and support those improvements. However, the cognitive aspect of their readiness may not align to the emotional (feeling) aspect of their readiness that may limit their intention to fully support those improvements to the best of their capability. The reason of this limitation may lie in the lack of conducive climate and lack of confidence that affects their readiness to fully support and ensure the success of the improvement. Employees maybe ready to support improvements within their means of autonomy and capability, but may not be fully ready to try new way of creativity and innovativeness, simply because of fear, inconfidence influence by the lack of a conducive climate. Thus, by creating the desired climate, it is argued that employees’ readiness can be stimulated to allow for self-organising activities for effective improvements and for the organisation to evolve in a healthy and learning environment. Thus, job demand is perceived to affect employees’ readiness to support improvements least.

Communication (100%) and participation (100%) have the highest frequency of selection in planned improvement; however, participation had a lower frequency of selection in unplanned improvement (85%). The reason may be explained from the interview responses, which indicate that there is a heavy reliance on private sector participation to
implement unplanned improvement and less priority on employee participation. However, for planned improvements, employees feel that their participation is a crucial factor to ensure that the improvement process is understood at multiple levels.

Figure 5.2a Influential climatic factors for planned and unplanned improvement (quantitative).

Figure 5.2b Influential climatic factors for planned and unplanned improvement (quantitative) (cont’d).
5.4.3 Essential climatic factors under planned and unplanned improvement

Figures 5.3a and 5.3b show the frequency graph of the distribution of participants’ choice of essential climatic factors in planned and unplanned improvement. Compared to the selection of influential climatic factors, the distribution of the essential climate factors is much lower. Essential climatic factors are perceived by employees as the minimum requirement to achieve a minimum level of readiness to support improvement. Twenty-two essential climatic factors of varying frequency were selected by the participants. However, in planned improvement, participation was selected by 87% of the participants, followed by clear task roles and responsibilities (56%), communication (54%) and self-efficacy (51%). Where unplanned improvements are implemented in situations of crisis and unpredictability, the history of past achievement (92%) and participation (82%) dominates, followed by communication (55%), trust in top management (50%), clear task roles and responsibilities (46%), self-efficacy (43%) and group efficacy (43%). This can be explained by the involvement of a larger population of employees during unplanned improvements where the flow of knowledge and experience exchange, teamwork among taskforce groups and trust in top management to overcome complex problems are relied upon.

The comparison of the dominant essential climatic factors between planned and unplanned improvement clearly shows that similar factors are necessary to sustain minimum employee readiness in both cases. These factors are participation, communication and clear task roles and responsibilities. Surprisingly, employees’ job demand was regarded as the least important factor for triggering employee readiness for both planned and unplanned improvement and showed a similar pattern under influential climatic factors. Perceived organisational support (7% for planned and 9% for unplanned improvement) and internal customer focus and team processes (4% for planned and 5% for unplanned improvement) are also perceived by the participants as least important in triggering employee readiness. The results differ from previous arguments in the literature (see Chapters 2 and 3) and may be explained by the national philosophy of the ‘Malay Islam Monarchy’ that is embedded in the working culture; the unity of obedience to the monarchy and religion motivates the employees to be ready regardless of the constraints. Furthermore, the alignment of
Improvement initiatives to the nation’s goal is evident through His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam’s frequent speeches and physical appearance with the people.

Figure 5.3a Essential climatic factors for planned and unplanned improvement for the three departments.

Figure 5.3b Essential climatic factors in planned and unplanned improvement for the three departments (cont’d).
5.5 QUALITATIVE DATA

In order to reduce the degree of biasness or wrongly interpreted understanding of the questionnaire content, it was necessary to triangulate the results with qualitative data. The use of a qualitative method was to further understand how employee readiness can be promoted in a complex organisation and the workings of the climatic factors in stimulating employee readiness. Both face-to-face qualitative and quantitative methods were conducted in parallel and covered the same sample population. Interview sessions were conducted prior to the survey to avoid any influence of the survey content on the participants’ first perceptions. The face-to-face interview and survey session method was found to be most convenient and quickest for both parties (researcher and participant) due to the constraints of availability and time for the participants. The interviews were carried out in a closed comfortable room to ensure the participants’ comfort and sense of confidentiality. An informed consent form was signed and information sheet provided prior to the interview (a sample of the consent form and information sheet is available). This was to ensure that the participants understood clearly the reason for conducting the study and the process of participating.

5.5.1 Interview questionnaire for Brunei’s public service civil servants

There are two types of interview questionnaire: one type of questionnaire was directed to the organisational contacts for a holistic view of the organisation’s direction in relation to improvement initiatives, i.e. the Director General of Public Works and directors. The other type of questionnaire was directed to the improvement agents ranging from top, middle and non-managers, similar to that of the survey. The questionnaire content relates to the implementation effectiveness of improvements and the desired climate necessary to promote employees’ readiness to support improvements. The questionnaire was pilot tested on a target population of 20 participants involving improvement agents in the Water Services Department ranging from senior water engineers down to chief technical assistants. The semi-structured interview questions were available in both a English and Malay version (see Appendix 2 and Appendix 7). The Malay version was approved by the Acting Director of the Bureau Linguistic and Language, Brunei. The interview questions were clearly understood by all the participants, hence no modification was required. The
questionnaire was tested and found agreeable in terms of its wording, the availability of choice of language and its clarity. The relevancy of the interview questions to the participants’ line of work and the issues faced resulted in a positive and straightforward response. Thus, the interview questionnaire contents were found to be validated, reliable, applicable and justifiable based on the perception of the participants.

5.5.2 Data gathering
Each interview was voice recorded, coded, transcribed and analysed statistically and systematically to identify converging emerging themes. The data collected were stored on an Excel worksheet. The raw data was summarised using frequency and percentage distributions. The research evidence presented below is categorised into two parts. The first part, aimed at the organisational contacts, consists of ten questions aimed at obtaining information on:

1. A holistic perspective of the present state in terms of the strategic goals, vision and mission across the Ministry of Development, Public Works Department and its departments and how improvement awareness is translated to the employees.
2. The availability of key performance indicators and the participants’ perspective on the modernised way of managing to achieve the future state.
3. Examples of planned and unplanned improvements implemented in the last year.
4. The frustrations and difficulties hampering the success of improvements.
5. How the organisation facilitates improvements and what the influential and essential climate factors are in planned and unplanned improvement.

The second part is aimed at improvement agents and consists of six questions aimed at obtaining information on:

1. Identifying the desired essential and influential climatic factors in planned and unplanned improvement.
2. The major frustrations when implementing planned and unplanned improvement.
3. The participants’ perspective on the usefulness of a readiness climate assessment tool.
4. The participants’ perspective on the frequency that planned improvement becomes unplanned and how improvements have succeeded in the past.
5. How improvements have been successfully implemented, especially when things get chaotic.

5.5.3 Interviews with the organisational contacts
The interview consists of ten questions and is directed at the organisational contacts, such as the Director General of Public Works and the director of each organisation. The data collected from the interviews and analysed from the transcription are presented as follows:

Question 1: What is the current vision, goal and mission of the Ministry of Development and Public Works? What is the future direction? How is this communicated down the organisation?

Evidence from the respondents’ feedback highlighted the alignment of the organisations’ vision and mission to support the Public Works Department’s vision and mission. The responses from the organisational contacts and directors involved three departments, namely the Water Services, Road, Drainage and Sewerage Departments (see Figure 5.4). Towards modernisation, strategised efforts under the civil service vision for the 21st century to support the National Vision 2035 initiated the alignment of strategies and goals among other ministries and departments.
**PUBLIC WORKS DEPARTMENT**  
**Vision:** Built Environment of Distinction  
**Mission:** To develop a comprehensive infrastructure, buildings and services for a nation building towards quality living

<table>
<thead>
<tr>
<th>ROAD DEPARTMENT</th>
<th>WATER SERVICES DEPARTMENT</th>
<th>DRAINAGE AND SEWERAGE DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vision:</strong> Quality roads. Towards sustainable development</td>
<td><strong>Vision:</strong> W.A.T.E.R for ALL</td>
<td><strong>Vision:</strong> Clean, sustainable rivers and stable coastline</td>
</tr>
<tr>
<td><strong>Mission:</strong> Facilitates the mobility and socio-economic needs of the community of Brunei Darussalam by providing and maintaining a safe, reliable and quality road infrastructure.</td>
<td><strong>Mission:</strong> To ensure a safe, adequate, continuous supply of potable water, in accordance with the World Health Organisation standards for drinking water, for the people of Brunei Darussalam.</td>
<td><strong>Mission:</strong> Continuously improving sewerage, drainage and coastal infrastructure and service to ensure high quality living.</td>
</tr>
</tbody>
</table>

Figure 5.4 Alignment of the vision and mission of the three departments in the Public Works Department.

Recent changes within the Ministry of Development and Public Works Department in 2010 involved major reshuffling and new appointments, initiating new thinking and direction. The changes involved ministers, permanent secretaries, the Director General of Public Works, directors, assistant directors, senior managers and engineers within the Ministry and departments of the Public Works Department. The objective of this new direction is to gain the public’s confidence in the delivery of services and to demonstrate transparency. In relation to the new direction, a few of the top managers commented:

>`We need to strengthen ourselves as a Technical Authority. That means we need to be credible. That's very, very important. So, I feel, we need to do more R and D function, which we don’t do much R and D now, actually. As a Technical Authority, we need to strengthen ourselves in terms of expertise and professionally. Then, secondly, probably in the future we become innovators.’ (P1.OC1)"
We want to show more transparency. We know that this Department has got plans, projects to mitigate flooding problems and obviously, this information is not open to public due to ongoing studies on mitigating the problems ... We want public to feel confidence with us. We want public to see the Department ready and able to mitigate the current flooding problem.' (P1.OC.3)

To culture a new mindset in the organisation and support improvements, the direction of management has shifted towards more openness to ideas. Transparency of information flow relied on the top-down and bottom-up level of communication and participation to respond to complex challenges. These activities were reflected in the interviews, where the participants mentioned frequent meetings and involvement of the key players within the organisation, departments and Ministry. However, communicating this new direction down to the employees in an innovative and effective way remains a challenge for top managers. As a few top managers commented:

'I’ve already socialise this one at the senior management meeting level. I’ve also started to go down to the Departments, DTS (Department of Technical Services), DOD (Department of Development), DDS (Department of Drainage and Sewerage) and DWS (Department of Water Services), actually trying to again socialise and promote this vision and direction.. The mission is there but how we want to arrive to achieve in that direction, I’m looking in a new way, away from the traditional way of management.' (P1.OC.1)

'I intend to cascade it down to the bottom level. That’s why if it stops there at the senior then the participation is only on top. I’ve inform them to cascade it down but I don’t know if they are doing it, but I might have to do it in my own way.' (P1.OC.3)
Question 2: Is there any means or indicators to know the present state of the organisation’s performance? What type of organisation and way of management do you visualise the future state?

In their interview session, the top managers expressed the challenge of setting clear strategic goals and benchmarks in alignment with the Ministry’s strategic plan and national strategies. The new minister has yet to set a clear direction, goals and expectations for each of the departments through the alignment of each strategic planning, their objectives and targets. Currently, the directors (some newly confirmed and some in acting posts) are on a learning curve to adapt to these new challenges. Particularly in responding to unplanned improvement such as frequent flooding, unexpected crises due to landslides, major power failures affecting the water supply and major service disruption. Another challenge to establishing a strategic performance measurement is that it cannot cope with unpredictability, as the activities are based on planned improvements. Thus, creating a measurement that incorporates adaptability and flexibility remains necessary, as some of their comments reveal:

`We do have the developed Key Performance Indicators (KPI), but I know that at present, the issue now is that it’s only on paper. I don’t believe any organisation even at present, we are doing more than that. We need something to measure ourselves, something real.’ (P1.OC.1)

`We have yet to establish the indicators and how we are going to monitor this.’ (P1.OC.3)

To cope with current challenges, the desired state of the organisation expressed by top managers is one that is dynamic, credible, regulatory and more of an authority supported by an adaptive and flexible management style. As expressed by the top managers:
'To me, organisation should be dynamic. Firstly, we'll have to change as change is required, when we need to address the issues. It should be adaptable and flexible.' (P1.OC1)

'My own way of management, I prefer not just top down but I also like bottom up approach. That is one that is challenging. More horizontal.' (P1.OC3)

'So, perhaps, personally, I feel it's more of the vertical management. Perhaps, the layers, maybe less bureaucratic.' (P1.OC2)

Question 3: With the strategic plans in place (if any) in the Ministry of Public Works Department, how are the improvement activities in each organisation or department aligned to the Ministry or Public Works Department’s objective?

In their interviews the top managers expressed the importance of having clear directive goals and strategies in the Ministry to allow them to properly align the department’s improvement strategies and programmes. As expressed by the top managers:

'We’re trying to align but I always find that the Ministry is not very clear about what they want. They’ve their own strategic plans, but their plans not specific so I’ve the problem of knowing what the goal is. They’re a general goal but it’s too general.' (P1.OC.2)

'We have no definite means of measuring our performance. (P1.OC.3)

Question 4: In the last year, can you give examples of significant planned and unplanned improvements that the organisation has experienced that can relate to employees’ involvement?
Top managers expressed some of the major improvement programmes as a way of moving forward. However, as challenges become complex, particularly for unplanned events, the availability and readiness of the right supportive, knowledgeable and reliable workforce becomes crucial for the organisation to adapt and survive. For effective improvements, managing the soft and hard systems is also important, in order to respond well to the uncertainty of improvements. As the top managers expressed:

`The way, I see things, when we invest in IT (Information technology), we need to synchronise to the soft factor, people, system.' (P1.OC1)

`I think reshuffling, it boils down into that we’ve not plan it well. If we plan it well, it wouldn’t be chaotic. I keep on saying, we need to become the Manchester United or Chelsea. We’ve a very good 1st team, substitute, reserve team and probably the youth team. If the 1st team is unable to deliver, we’ve the substitute to take over that, in overall, it makes us ready.' (P1.OC.1)

The readiness of the Public Works Department to counteract and survive the uncertainty of current challenges is enforced through the implementation of new departmental and developmental projects. Self organising activities were apparent as the urgency to adapt increases with the added pressure of reshuffling and loss of personnel. The improvements are to ensure the development and sustainability of resources and infrastructure. Improvement also includes updating legislative procedures and standardising procedures and systems through ISO accreditation, information technology upgrades and new technologies aimed at better services for the public. As expressed by the top managers:

`Improvement programmes like GEMS is starting. At the same time, we’re looking into reorganisation, our IT system like PROMISE.' (PC1.OC.1)

`In disasters, we had to create some process initiated by the Minister and NDMC (National Disaster Management Committee). We also had unplanned improvements.
Some people were promoted up, losing people, a lot of things like we thought was losing people turn out to be perhaps improvement.’ (P1.OC2)

‘Major floods from nature events. There are also reshuffling of staff, losing of staff. It’s happening far and fast and we’ve to adapt.’ (P1.OC3)

Question 5: From your experience, what are your frustrations or difficulties if given further attention could expedite and ensure the success of improvements? (Examples can refer to ‘hard’ and ‘soft’ management aspects). Can you elaborate on each aspect or issue?

One of the major frustrations or difficulties relayed by the organisational contacts in their interview sessions relates to the employees’ attitude to support improvement, particularly in needing their support to understand the urgency of matters when needed. This particularly relates to action, communication in the form of accessibility and feedback of information from employees to further expedite improvements, especially when experiencing unplanned improvement. However, top managers are aware that the success of improvements can only be achieved and supported through the balance of ‘hard’ and ‘soft’ factors. The hard aspect of management refers to the system and technology, while the soft aspect of management refers to the human social aspects.

‘When we align both hard and soft, then we have the support. I think, 50% problem is system and 50% is soft issue.’ (P1.OC.1)

‘With the present organisation, to facilitate the improvement is a challenge. I think, we can facilitate but need more enhancement and commitment from people.’ (P1.OC.3)
Questions 6, 7 and 8 refer to the planned and unplanned improvements and how the organisation is facilitating those improvements and what the influential and essential climatic factors are that may be required to promote employees’ readiness to support those improvements.

Top managers are aware of the importance of balancing the system, or ‘hard’ factors, and people, or ‘soft’ factors, for improvements to be supported. Having an adequate, knowledgeable and skilled workforce with the right mindset and readiness to adapt to complexity makes an organisation adaptable. Thus, creating the right climate based on the employees’ perspective will lead to effective strategies. As one of the top managers commented:

‘I say to myself, if the organisation is not giving them what they need to have, this is what we are getting. We must look into the system, the macro issues, then maybe get the things in order, in other words to get the right perspective from employees.’ (P1.OC.1)

It is important to recognise the conducive climate from the employees’ perspective if improvements are to succeed. Examples of the range of climatic factors mentioned are management support, communication, past experience, participation, reward and recognition, transfer of knowledge and skills and a supportive information system. To create the right climate requires a change in the leadership role and skills. The leadership skill is from being a directive, top-down single leader to one that acts like a mentor promoting distributed leadership and creating a learning and adaptable organisation. As highlighted by the top managers:

‘I think management support is very important...Communication is another factor. They are ready but they need to be pushed, encouraged.’ (P1.OC.2)

‘Mentoring is important and they must be ready for this. They must transfer knowledge and skill. We don’t make anybody indispensable. Probably, I’ll have to provide all the things for them, say on the complain tracking, I’ll have to provide them the system,
rewarding to make them want to achieve something. Transparency, not only to the public, but to our organisation through regular meetings through communication and participation.’ (P1.OC3)

However, top managers realise that even if employees show that they are willing and happy with the improvement, action is missing. The willingness of employees to support improvement may lie on the embracing of the ’Malay Islamic Monarch’ principles of working culture where obedient to the monarch guided by the values of the Islamic religion place the public’s concern at the forefront. However, being obedient and having the autonomy to carry out the improvement does not mean that employees have the capability to fully support improvements. The lack of a conducive climate that are needed to influence employees’ readiness to fully support and succeed improvements need to be recognised by their leaders to make improvements viable and sustainable. Such climatic factors are job knowledge and skills, trust, communication, participation, top management support and other influencing factors that enhance the message of improvement process to be understood at multiple levels. As highlighted by one of the top managers:

‘When I talk to my people, they seemed happy to have improvements. It seems to me how do I enhance. Seemed that they’re willing but it doesn’t happen ... I’ve never heard anybody say no. They’re the ones giving ideas but I wonder why they are not actually doing it.’ (P1.OC.2)

This statement shows that there is a multidimensional aspect of employee readiness to be satisfied and align with employees’ behaviour to act. These multidimensional aspects of readiness are the cognitive (belief), affective (feel) and intentional (act) dimensions that need to be satisfied. Essentially, leadership is crucial in triggering employees’ readiness to support improvements. The leadership qualities needed are honesty, the ability to mentor and earning employees’ trust by demonstrating that they believe and are committed to those improvements. As expressed by the top managers:

‘I think very important is honesty. With honesty, you’ve the right intention, being honest with what we do, being honest about our need, so there is a lot of the management
principle. One of them is saying, you walk the talk...So, in a way, honesty and having the right intention because I believe that I cannot sell if I don’t believe in it. So, it’s very important, you believe in it so that you’ll convince people.’ (P1.OC.1)

Questions 9 and 10 ask the participants if they feel that planned improvement always turns out to be unplanned. In its occurrence, participants were asked to describe in what way and their view on the importance of employee readiness and the availability of a readiness assessment tool for effective improvement.

All directors, including the Director General, agreed on the unpredictability of planned improvement turning out as unplanned. To be able to cope with these challenges, employee readiness is crucial for an organisation to be ready. The availability of a tailored readiness assessment tool may assist managers to strengthen the connectivity between managers and employees and between employees within the hierarchical level in the organisation to embrace a more positive culture. The availability of a readiness climate assessment tool would provide an opportunity to channel the employees’ voice for management to improve towards effective improvements. However, the assessment tool should be applicable to multilevel employees within the hierarchical structure of the organisation, as the perception may vary between multilevel employees. As some of them expressed:

‘Readiness is important, otherwise improvement will not succeed...Sometimes, what we feel is important, may not be important for them, what is important for them may not be important for us. My role is to groom the next leader. The tool will be helpful in recognising where the gap is from each level.’ (P1.OC.1)

5.5.4 Interviews with the improvement agents

The second form of interview questions were directed to the improvement agents, which numbered 115. The other five participants were the organisational contacts (the Director General and a director of each department), as described in section 5.5.3. Respondents who represented the improvement agents ranged from top managers, middle managers and non-managers in three departments. The data collected from the interviews were coded,
translated and analysed from the transcription to consolidate the emerging themes, as presented below.

5.5.4.1 Influential climatic factors

Question 1: In relation to your experience of planned improvement in the last year, what influential factors do you think would influence your belief and willingness to support improvement? How about in the case of unplanned improvement?

Based on the responses of the 119 participants interviewed in the three departments, Figures 5.5a and 5.5b show the frequency graph of the distribution of the influential climatic factors in planned and unplanned improvement as perceived by participants. From the interview results, a total of 22 climatic factors were identified. These climatic factors correspond to the range of climatic factors extracted from the literature, with an additional climate factor of top management’s trust in subordinates extracted from the interviews. However, some of the influential factors were potentially influential as compared to the rest. In planned improvement, the dominant factors include communication (89%), top management’s trust in subordinates (85%), clear task roles and responsibilities (79%), participation (78%), trust in peers (77%), top management support (66%), clear expectations and direction from senior managers (63%), group efficacy (63%), self-efficacy and self-valence (58%), job knowledge and skills (55%), trust in top management (55%), history of past experience (48%) and the manager/employee relationship (43%).

In unplanned improvement, the potential influential climatic factors include top management’s trust in subordinates (88%), communication (80%), participation (68%), clear task roles and responsibilities (66%), trust in peers (64%), group efficacy (61%), self-efficacy and self-valence (58%), top management support (47%), clear expectations and direction from senior managers (46%), job knowledge and skills (42%) and trust in top management (39%).
Within the subset of both planned and unplanned improvement, the dominant common influential climatic factors are top management’s trust in subordinates, communication, participation, clear task roles and responsibilities, trust in peers, group efficacy, self-efficacy and self-valence, top management support, clear expectations and direction from senior managers, job knowledge and skills and trust in top management. These 11 influential climatic factors indicate a high level of teamwork and trust at all levels, top-down and bottom-up, that influence employees’ readiness to support any nature of improvement. Other influential climatic factors which are mentioned but perceived to be less important by the participants include job demand, flexibility in policies and procedures, perceived organisational support, management’s opportunity to lead continuous improvement, internal customer focus and team processes, common understanding of quality and customer requirements, job satisfaction and conduciveness to unlearn.

Figure 5.5a Frequency graph showing the distribution of the influential climatic factors in planned and unplanned improvement (qualitative).
5.5.4.2 Essential climatic factors

Question 2: Out of the factors that you mentioned, what factors do you think are the most essential, without which you cannot achieve readiness to support those improvements? This refers to planned and unplanned improvement.

Based on the responses of the 119 participants interviewed in the three departments, Figures 5.6a and 5.6b show the frequency graph of the distribution of the essential climatic factors in planned and unplanned improvement as perceived by the participants. From the interview results, a total of 22 climatic factors were identified. These climatic factors correspond to the range of climatic factors extracted from the literature, with an additional factor of top management’s trust in subordinates extracted from the interviews. However, the most potentially essential factors in planned improvements are participation (87%), communication (54%), top management’s trust in subordinates (86%) and clear task roles and responsibilities (56%). The high percentage of participation factor can be explained by
a sense of belonging to the improvement activities that may trigger minimum readiness in employees’ to support improvements. Top management’s trust in subordinates, identified as an additional factor, can be explained by the need for encouragement and trust in employees by their manager to allow them to be creative and innovative in a learning environment. The feeling that their manager trusts in their competency, decision-making and creativity increases their sense of belonging to improvement programmes, thus triggering minimum readiness. However, factors like employees’ job demand, perceived organisational support, internal customer focus and team processes were perceived as being least important factors.

![Figure 5.6a Frequency graph showing the distribution of the essential climatic factors in planned and unplanned improvement.](image-url)
5.5.4.3 **Constraints that impede employee readiness**

**Question 3.** What are the major frustrations in implementing improvement that might hinder your readiness to fully support improvement? In planned improvement and unplanned improvement.

Figure 5.7 below shows the frequency graph of the range of factors that contribute to the frustration experienced by the participants in fully supporting planned and unplanned improvements. In planned improvement, the frustration felt by the employees’ involves 15 factors, namely top management support (38%), trust in top management (34%), trust in peers (23%), employees’ attitude (22%), logistic and system support (15%), communication (19%), job demand (13%), job knowledge and skills (10%), participation (7%), clear task roles and responsibility (6%), clear expectations and direction from senior managers (6%), self-efficacy and self-valence (4%), group efficacy (4%), conduciveness to unlearn, and flexibility in policies and procedures (1%).
The greater frustration factors such as trust in top management (34%), top management support (38%) and employee’s attitude (22%) emphasise the need of leadership skills to lead and provide adequate resources in order that employees feel ready to support improvements. The lack of trust in top management felt by the participants during the implementation of improvement occurs when there is a lack of fairness in allocating task roles and responsibility, distribution of workload, and the fairness and reliability of top management in their decision-making and action. Frustration also includes the low level of appreciation and recognition given to the employees by their managers.

Figure 5.7 Frequency graph showing the distribution of the factors that hinder employees’ readiness to support improvement.

The lack of top management support refers to financial and administrative matters. Such support includes providing adequate requested funds, professional and skilled manpower, support in system and legislative matters needed for employees’ readiness to effectively implement improvements. Similar pattern is observed for the distribution of factors in
planned and unplanned improvement, more prominent in planned improvement. It is speculated that for planned improvement, top management are more cautious and reserved in allocating adequate resources and support as compared to unplanned improvement. For unplanned improvement, the chaotic situation creates more excitement and openness leading to increased receptivity of ideas, participation and support from top-down and bottom-up management. The accessibility of the solutions to counteract bottleneck problems, which represent the root of employees’ frustration, are more readily made available during the chaos of unplanned improvements. For planned improvement, unconduciveness may evolve from rigid procedures and a lack of top management support and trust. As indicated by one of the participants:

‘The good thing about chaos is that the excitement is there. I see them excited. Because its urgent, whatever they do is well spent unlike those in planned, because even when they planned it well, they are not sure that it’s going to be implemented or not. Especially when decision from the top is not to take this as important to be implemented, it makes them frustrated. I’ve spent a lot of time and in the end it does not get implemented. But in chaos, they feel excited, and most important is the objective of the task because if it is chaos, the mindset is that whatever they do or propose will become in reality.’ (P1.B84)

5.5.4.4 Usefulness of a readiness assessment tool

Question 4. Do you think a readiness assessment tool would be useful for management to improve employee readiness?

Results from the interviews show that 100% of the 119 participants agreed on the importance and usefulness of a readiness assessment tool. They stated that this assessment tool would provide a channel for management (particularly top and middle management) to hear their voice and frustrations and for management to conduct improvements. This would also provide Human Resource Management in the Public Works Department or the department itself with the means to identify improvement gaps relating to employee readiness for effective improvements. However, the effectiveness of a diagnosis tool depends on the openness of top managers to accepting and having the mental strength to
actually `do it rather than just knowing’. It completes the cycle of improvement, which is to identify, plan, do and act (improvise). As indicated by two of the respondents:

`Yes, it's very useful because from there the top management will know rather than telling them in the face. They have to know the situation. Sometimes if we tell them, they listen sometimes they don’t, so with that tool, it indicates clearly what is lacking.' (P1.B60)

`Yes, but depends whether the top management are ready to accept it and do something about it.’ (P1.B13)

5.5.4.5 The unpredictability of planned improvement

Question 5: In your experience, do you feel that planned improvement always comes out as unplanned? If so, in what way? Do you feel improvements have succeeded in the past? If not, why?

The result of the interviews indicate that 100% of the participants agree with the fact that planned improvement always comes out as unplanned, supporting previous researchers’ arguments (Dawson, 1996; Burke, 2002). Figure 5.8 indicates seven reasons ranging from technical difficulties such as on-site complications, inadequate planning and unforeseen circumstances (44%), expectations of customers that are constantly changing and ad hoc (37%), unpredictable weather patterns caused by climatic change triggering flooding, drought, fires (35%), top management support such as providing the required resources and support on a short-term basis rather than incorporating long-term solutions (17%), employees’ attitude (12%), lack of communication (4%), and the fast past of technology change, particularly in information technology (2%).
Figure 5.8. Range of reasons why planned improvement always comes out as unplanned

Figure 5.9. Reasons for improvement failure

Employees’ attitude (28%) and top management support (25%) have the highest frequency. From the above, unplanned improvements are more of a current challenge that requires
quick adaptation. All the respondents felt that, overall, improvements have been successfully implemented although not fully achieving their goal and still require improvisation, particularly when things become chaotic. There are ten possible reasons that improvements may have a certain degree of failure in the participant’s opinion and experience (see Figure 5.9). These causes of failure range from employees and top management’s attitude (28%), lack of top management support (25%), lack of trust in top management (16%), technical difficulties on site (18%), lack of job knowledge (10%), nature (9%), lack of participation (7%), lack of communication (7%), lack of awareness of the urgency of the improvement (5%), and a lack of clear task roles and responsibilities (3%).

Employees’ attitude refers to a lack of commitment, trust and teamwork support from top-down, bottom-up and sideways hierarchical employees among units, sections and departments. Top management support refers to the lack of the top management support and commitment required by their subordinates for improvements to succeed. Top management support is expressed by the respondents as providing adequate resources, financially, physically and administratively, as well as ensuring top management’s trust in and appreciation of their subordinates. As indicated by some of the respondents:

‘If they don’t follow the procedures, it is considered that it’s not working. It comes back to the attitude of the people and we end up explaining again to them especially if the procedures are new, to make them understand in order to adapt. Same as unplanned.’ (P1.A15)

“We need top management support by trusting us. This refers to unplanned as well.’ (P1.A15)

‘Lack of support from senior management. In whatever you do, it’s the disagreement and they don’t support you or give advice so it lowers your motivation.’ (P1.A33)
Conduciveness for improvements to succeed during chaos

Question 6: In your experience, how have improvements been successfully implemented, particularly when things get chaotic?

The majority of the interviewed participants mentioned that opportunities are created more readily during chaos due to the excitement of uncertainty. Top managers more readily accept and act on new ideas by providing their support and commitment in allocating the required resources, which they unreally provide in normal circumstances such as in planned improvement. The climate changes for unplanned improvement, in that more conduciveness is felt, as chaos attracts more participation, networking interaction, communication, sharing of information, sharing of knowledge and experience among employees between hierarchical levels within the organisation. Urgency if felt thus unintendly a conducive climate emerges that stimulates employees’ readiness to provide more support. Thus, teamwork is critical at all levels for an improvement initiative to succeed. Teamwork enhances the sense of belonging and feeling of importance by the employees, thus influencing their readiness to support improvement. On a multilevel platform, communication, participation, clear task roles and responsibilities and top management’s trust in subordinates represent the most essential factors that trigger employees’ readiness to support improvement. As mentioned by the respondents:

‘Communication as a TEAM is really important not communication one to one. Everybody must know the movement. This will avoid misunderstanding, miscommunication, conflict, hurting one another, delays especially when implementing unplanned improvement.’ (P1.B59)

‘Appreciation is one of the factor but the main thing is trust of the top in us to do the job, reflecting that genuine feeling of trust and believing in us that we can do it, that’s the thing that makes me positive, ready.’ (P1.B81)
‘So teamwork, communication and participation is important. The group efficacy is also important and I tend to select the strongest member in the team. The confidence in the team is important to complete the job in time.’ (P1.B117)

‘Essential is the trust in the people that we give instruction and their positiveness and readiness to accept the instruction and understand their clear responsibility.’ (P1.A4)

When asked in the interviews about how they cope when things get chaotic, a total of 18 influential factors emerged that influence their readiness to support improvements. They are communication (87%), top management’s trust in subordinates (86%), participation (64%), trust in peers (53%), group efficacy (47%), top management support (31%), clear task roles (28%), sharing of information (23%), self-efficacy and self-valence (21%), clear expectations and direction from senior managers (21%), understanding urgency (21%), trust in top management (19%), job knowledge (19%), manager/employee relationship (16%), history (16%), logistic and system support (9%), conduciveness to unlearn (8%), and management’s opportunity to lead continuous improvement (2%) (see Figure 5.10).

![Factors that helped employees cope with chaos](image)

Figure 5.10. The 18 factors that help participants cope with chaotic events.

Top management’s trust in subordinates, participation and communication are among the factors with the highest frequency, reflecting the essential factors neede to trigger
employee readiness for effective improvements. The factors correspond to the essential climatic factors described section 5.2.4.3.2.

5.6 ANALYSIS AND RESULTS

Cross-analysis between qualitative, quantitative and literature review data highlights the emerging findings. The intention was to identify areas of convergence and divergence and identify the emerging issues and dominant climatic factors needed for employees’ readiness to support improvements. The outcome of Phase 1 will be further developed into an itemised statement measurement survey questionnaire and tested for the participants’ agreement in the final study.

5.6.1 The issue of attitude as the cause of improvement failure

The literature highlighted the issue of attitude contributing to 70‒80% of improvement failure (Pascale, 1999; Beer & Nohria, 2000). The interview results from this study support the argument, as attitude has the highest frequency (28%) among other reasons for improvement failure (see Figure 5.9 in section 5.5.4.5). This is supported by the statements of some of the respondents:

‘Yes, some failed due to lack of unreadiness of staff in terms of being well equipped. The consultant also relies totally on us so we feel that we are the consultant sometimes. Meaning it’s not tailored. The expertise is not shown in our perspective.’ (P1.A37)

‘If referring to GIS, not 100% because mostly the staff is not really ready in terms of attitude.’ (P1.A14)

5.6.2 The importance of employee readiness for effective improvements

Eby et al. (2000) use chaos and complexity theory to emphasise the importance of organisational readiness for improvement. According to these theories, organisations operating in an environment consisting of an infinite number of systems and sub-systems that are in a constant state of flux need to be in a continuous state of readiness for success to be realised. The interview results support the argument, as emphasised by some of the participants:
‘Basically, being a leader, you have to be ready for anything whether it’s planned or unplanned. You have to instill that readiness factor.’ (P1.B71)

‘The most important thing is the time management and how they manage the organisation. Without managing the priorities in order, the whole organisation can collapse and it’s important to be ready in every sense to counteract the unforeseen.’ (P1.B74)

Demographic data from the survey shows that 95% of the respondents are ready to support improvements but may lack the ability for the improvements to fully succeed due to a lack of conduciveness. All the respondents felt that a readiness assessment tool is important for effective improvement.

5.6.3 Understanding the organisational climate

The converging outcome of organisational climatic factors in the Brunei context is specific. These climatic factors are not obvious but emerge as a result of the dynamic self-organising process among multilevel employees within the organisation. Employees respond to chaos positively in order to adapt and survive the constant flux of instability. The foundation of initial positiveness lies in the obedience working culture embraced by the principle of ‘Malay Islamic Monarchy’. The concept of ‘Malay Islamic Monarchy’ relates to the strong religious faith, loyalty to the Monarch and a desire for a sustainable National development growth. Within the hierarchy of autonomy governed by absolute monarch rule, attending to public’s concern in achieving a good quality of life as part of the Nation’s vision 2035 is placed upfront. His Majesty’s caring concern over his people’s welfare and quality of life enhanced the cognitive and affective aspect of employees’ readiness to support improvements. However, the lack of a conducive climate may limit the readiness of employees to fully support improvements as the factors are related to their level of confidence, capability and trust among peers and their managers. Due to the high level of interrelation and interaction of social context within the hierarchical connectedness between units, sections, departments and ministries, it is important to create an open climate for self-organising to take place within the social context. Through feedback and adaptation, the conducive climate that emerges increases employees’ readiness to support
and sustain improvements. The findings highlight how employee readiness evolves in a complex and adaptive organisation when they self-organise. It is important to recognise the emerging organisational climate that makes improvement work when employees self-organise within the organisation during the instability period of any improvement, whether planned or unplanned.

5.6.4 Instability of improvement requiring an `open' climate
All the interviewed participants had experienced the instability of planned improvement turning into unplanned improvement, thus requiring the right climate to maintain a continuous level of employee readiness for quick adaptation. This finding supports other researchers’ arguments that maintaining the right level of employees’ readiness in order to adapt to the constant flux of a combination of both natures of improvement or change is important (Eby et al., 2000; Burke, 2002; Madsen et al., 2006; Brysson et al., 2006). These improvements may have a major personal impact on individuals, groups and organisations, influencing their readiness attitude towards improvement (Leiter & Harview, 1998). As indicated by one of the respondents in the interview:

`In unplanned like reshuffling happening in the last year, it did impact our Department, new people coming in, loss of staff and that’s the most frustrating. It’s the human resources that we lose, not so much on the technical, financial and environmental. It’s our human resources that have the capacity and capability, that help us make it work. Their loss is the most frustrating thing.' (P1.B71)

However, in facing complex challenges, organisations have a tendency to adapt through self-organising and it is important for managers to recognise the emerging conducive climate in terms of its climatic factors to be able to facilitate positive employee readiness. As two interviewed respondents commented:

`In chaotic moments, try to find the root of the problem. Communication and discussion is important at that time. Delegating clear task roles is important that would make it a success. The most important thing is we know what we need to do and we trust ourselves
that we can do it and we get the support from top in terms of clear direction and support from our people in terms of cooperation is the thing that makes us ready.’ (P1.B47)

‘To my readiness, over the pass experience, though I was initially not so keen on change or improvement especially on unplanned, over the years, I had to come to terms as I go higher to look at different angle. That is where and when that you create that kind of openness.’ (P1.B71)

5.6.5 The uncertainty of improvement (improvement content)

One of the subsidiary questions was: ‘how can employee readiness be effectively stimulated to support any nature of public service improvements in complex and adaptive organisations in the Brunei context?

The demographic findings from the quantitative study supported by the qualitative findings in relation to the frequent occurrence of unplanned improvement and the likelihood of planned improvement turning into unplanned improvement just shows how unpredictable and complex improvements can be. Of the surveyed participants, 72% said that unplanned improvements occurred more than twice a year, and 100% of the interviewees mentioned the experience of planned improvement turning out to be unplanned.

Employee readiness responds to a different range of climatic factors under each type of improvement. Wallace et al. (2007) argue that the capacity for self-organising and creativity are greatest at the edge of chaos (Wallace et al., 2007) and it is within this condition that readiness is readily achieved (Rosenhead, 1998). In this study, under the instability of both planned and unplanned improvement, a comparison of the interview and survey results highlights a subset where the common dominant climatic factors for employee readiness manifest as a result of self-organising (see Figure 5.11). The range of dominant climatic factors within the subset is identified by filtering the climatic factors above the acceptable benchmark. The acceptable level is taken as the average result of the interview and survey data. This subset is where the employees’ readiness level is argued to be continuous and sustainable to survive any nature of improvement. Identifying the
climatic factors within this subset provide the necessary conduciveness for a complex organisation to evolve and become adaptable to any changes or complexity.

<table>
<thead>
<tr>
<th>A</th>
<th>Influential climatic factors for planned improvement (Figures 5.12a and 5.12b)</th>
<th>B</th>
<th>Influential climatic factors for a synergy of planned and unplanned improvement</th>
<th>C</th>
<th>Influential climatic factors for unplanned improvement (Figure 5.13a and 5.13b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History/Manager/employee relationship</td>
<td>Communication</td>
<td>Communication</td>
<td>Communication</td>
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<td>Communication</td>
<td>Participation</td>
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<td>Participation</td>
<td>Top management support</td>
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<td>Trust in top management</td>
<td>Self-efficacy and self-valence</td>
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<td>Self-efficacy and self-valence</td>
<td>Group efficacy</td>
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<td>Group efficacy</td>
<td>Job knowledge and skills</td>
<td>Job knowledge and skills</td>
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<tr>
<td>Job knowledge and skills</td>
<td>Clear task roles and responsibilities</td>
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<tr>
<td>Clear task roles and responsibilities</td>
<td>Clear expectations and direction from senior managers</td>
<td>Clear expectations and direction from senior managers</td>
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<tr>
<td>Clear expectations and direction from senior managers</td>
<td>Top management’s trust in subordinates</td>
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<td>Top management’s trust in subordinates</td>
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<td>Trust in peers</td>
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</table>

Figure 5.11 Common dominant influential climatic factors that exist under a synergy of planned and unplanned improvement.
5.6.6 Public service organisations as complex and adaptive
Figures 5.12a and 5.12b show the comparative result of the interview and survey data for influential climatic factors under planned improvement, and Figures 5.13a and 5.13b refer to unplanned improvement. These results imply that as the complex and adaptive nature of public service organisations responds to instability, an unintended readiness climate manifests from within the organisation, promoting employee readiness as an adapt-to-improve rather than adapt-to-die survival strategy. And as the organisation self-organises, an initial state of readiness is triggered by the essential climate factors as a consequence of self-organising (see Figures 5.14a and 5.14b). The dynamic interaction of individuals feeds into the wider environment, which in turn influences the individual units, groups, sections and organisation within the organisation’s network. A higher level of employee readiness is further influenced by influential climatic factors. The empirical evidence provided as demonstrated in Figures 5.12a, 5.12b, 5.14a and 5.14b leading to the above conclusion are based on ‘employees’ perception’ as to the desired climate that can stimulate employees’ readiness and sustain improvements. However, the conclusive result is only limited to Brunei’s context and other organisational context with similar background.

5.6.7 Influential climatic factors for planned and unplanned improvement
Figures 5.12a and 5.12b show the comparative analysis between the survey and interview data for the influential climatic factors under planned improvement.
Figure 5.12a. Comparative results for survey and interview data on the influential climatic factors under planned improvement for all three departments.

Figure 5.12b Comparison results for survey and interview data on the influential climatic factors under planned improvement for all three departments (cont’d).
The similar climatic factors perceived as important by the interviewed and surveyed respondents validates the findings. However, the distribution frequency of the interview results is much less compared to the survey data. The common dominant influential climatic factors identified in the interview and survey results for planned improvement are history, manager/employee relationship, communication, participation, top management support, trust in top management, self-efficacy and self-va-lence, group efficacy, job knowledge and skills, clear task roles and responsibilities, clear expectations and direction from senior managers and trust in peers. The additional factor of top management’s trust in subordinates emerged from the interviews.

For unplanned improvement, the comparative results for the survey and interview data for the influential climatic factors are shown in Figures 5.13a and 5.13b. The common dominant influential climatic factors under unplanned improvement are identified as communication, participation, top management support, trust in top management, self-efficacy and self-valence, group efficacy, job knowledge and skills, clear task roles and responsibilities, clear expectations and direction from top managers and trust in peers. The additional factor of top management’s trust in subordinates emerged from the interview results.

Figures 5.12a, 5.12b, 5.13a and 5.13b showed differences in results between the results of the survey and those of the interviews for both the essential and influential climatic factors. To avoid any influence of the range of climatic factors of the survey questionnaire content on participant’s response, the qualitative interview session was conducted prior to the survey session. The aim was to get first hand impression of the percept desired climatic factors that have a strong impact on employees’ readiness to support for improvements, based on the success of past improvements. A closer percept range of climatic factors that affects employees’ readiness may explain for a lower frequency range of climatic factors from the interview results. However, when employees are exposed to the wide range of climatic factors that are listed in the survey questionnaire content, there is a tendency for participants to choose a wider range of climatic factors that may impact their readiness to a certain extent. It is speculated that the tendency to choose a wider range of climatic factors from the survey questionnaire content may explain for a higher frequency result. Thus, the
differences in frequency result between the survey and interview result over the same range of climatic factors. Thus, the qualitative result was found more reliable based on an immediate impression and the survey result was used for triangulation purpose in supporting the interview result.

Figure 5.13a Comparative results for survey and interview data on the influential climatic factors under unplanned improvement for all three departments.
Comparative results for survey and interview data on the influential climatic factors under unplanned improvement for all three departments (cont’d).

From both the interview and survey results under planned and unplanned improvements, the dominant influential climatic factors are communication, participation, top management support, trust in top management, self-efficacy and self-valence, group efficacy, job knowledge and skills, clear task roles and responsibilities, clear expectations and direction from top managers and trust in peers and top management’s trust in subordinates.

5.6.8 Essential climatic factors for planned and unplanned improvement

Figures 5.14a and 5.14b show the comparative results for survey and interview data on the essential climatic factors under planned improvement. The similar climatic factors perceived to be important by respondents in influencing their readiness under planned improvement validates the findings. However, the distribution frequency of interview results is much less compared to the survey data. The common dominant influential climatic factors identified are communication, participation, clear task roles and responsibilities, clear expectations and direction from senior managers and group efficacy.
Figure 5.14a. Comparative result between surveyed and interviewed data on essential climatic factors under planned improvement for all three Departments.

Figure 5.14b Comparative result between surveyed and interviewed data on essential climatic factors under planned improvement for all three Departments (cont’).
For unplanned improvement, Figures 5.15a and 5.15b show the comparative results for survey and interview data on the essential climatic factors for all three departments. The dominant essential climatic factors identified are communication, participation and clear task roles and responsibilities. The additional factor of top management’s trust in subordinates emerged from the interview results.

Figure 5.15a. Comparative results for survey and interview data on the essential climatic factors under unplanned improvement for all three departments.
Figure 5.15b. Comparative results for survey and interview data on the essential climatic factors under unplanned improvement for all three departments (cont’d).

From the above, a subset of common essential climatic factors exists under a synergy of planned and unplanned improvement (see Figure 5.16).
A
Essential dominant climatic factors under planned improvement (Figures 5.14a and 5.14b)

B (subset area)
Essential dominant climatic factors under a synergy of planned and unplanned improvement (Figures 5.15a and 5.15b)

C
Essential dominant climatic factors under unplanned improvement

<table>
<thead>
<tr>
<th>Communication</th>
<th>Participation</th>
<th>Clear task roles and responsibilities</th>
<th>Clear expectations and direction from senior managers and group efficacy.</th>
<th>Top management’s trust in subordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Participation</td>
<td>Top management’s trust in subordinates</td>
<td>Clear task roles and responsibilities</td>
<td>Top management’s trust in subordinates</td>
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</table>

Figure 5.16 Essential climatic factors within a subset synergy of both planned and unplanned improvement.

Under a synergy of both planned and unplanned improvement, the common dominant essential climatic factors identified are communication, participation, clear task roles and responsibilities and top management’s trust in subordinates.
5.6.9 Readiness as multilevel

We argue that the multidimensional and multilevel perspectives of readiness need to be aligned for effective improvements. In this study, the majority of the respondents (96%) multitask and play a major role as team members of a taskforce committee. Groups are regularly formed within the organisation, other departments and on a national level, for example the National Disaster Management Committee for effective coordination among involved stakeholders and agencies. Within each Department, majority of the respondents formed part of taskforce groups in and among the different units and sections. Thus, there is heavy reliance on teamwork and networking among various groups to effectively implement improvements. During the interview sessions, majority of respondents referred themselves as ‘I’, ‘we’ and ‘us’, reflecting their perspective as an individual and as a group member. As expressed by some of the respondents:

`For unplanned, its part of your responsibility, as a part of the team. You cannot leave the team because the organisation is also like a team. We cannot just let them be on their own because it relies on teamwork. When crisis happens, you must know where your strength is and optimising on that strength.’ (P1.A10)

`For unplanned, communication and working in groups, getting the support from them by sharing of ideas, make us ready for the unplanned. If some of the group members don’t feel confidence, then we have to give them the confidence, by believing in ourselves. Its the sharing of knowledge and experience that makes it work.’ (P1.A30)

`In planned improvement such as ISO, one important thing is the information communicated down by our leader. Why we are doing the ISO, what is ISO, what are the improvements that we are going to have and after that what do we see the improvements or benefits to our lab. For me, its believing it, and the feeling of being appreciated after the hard effort that you put in to make it succeed. To see the boss happy, that we are able to implement it with success. We are not doing this alone, it has to be a team effort and if you get the full support from everyone in the team then it makes you feel ready and want`
to do more. I get inspire through my team. The group confidence also influences my readiness.’ (P1.A25)

A multilevel perspective refers to the individual, group or organisational readiness that requires alignment in both the macro and micro domain (Ford et al., 2008; Weiner, 2009). As improvement is perceived differently at each level, i.e. organisation, individual and group (Caldwell et al., 2004; Ford et al., 2008), so does the level of employee readiness. As highlighted by top and middle managers:

`When you talk of readiness, it’s not enough to be just you being ready but you need everyone to feel ready. If not, you end up reminding everyone almost with everything and it’s tiring.’ (P1.B80)

`Sometimes, what we feel is important, may not be important for them, what is important for them may not be important for us. My role is to groom the next leader.’ (P1.OC.1)

`As you go up higher, you look at things at a different angle. Certain lower, you look at technical level, but as you go higher from engineer to EE, from EE to SEE and so forth, there are changes along the way. You look at different angles. The higher you go, the more global view you look at things. Your mind keeps up on opening and opening up. When you talk among other superiors, they will be referring why the change or improvement is required, it’s healthy for you. So communication and clear direction is important not only from the senior management but even when you talk to you friends, colleagues and lower staff on their ideas.’ (P1.B71)

Readiness at multilevels can only be achieved through the interactive connectedness between agencies, individuals and groups, placing participation and communication at its core (Morrison, 2002). As emphasised by one of the respondents:
The most essential as I said previously is communication among the various units, all levels, all hierarchy.’ (P1.A28)

The alignment of readiness at multiple levels (Caldwell et al., 2004; Ford et al., 2008) depends on the rate of connectivity, networking and information sharing brought about by communication and participation through feedback in both directions (top down and bottom up). The results from this study support the researchers’ argument, placing communication, participation, clear task roles and responsibility and top management’s trust in subordinates as the essential triggers of employee readiness to support improvements.

Eleven dominant influential climatic factors were also identified. These are trust in top management, communication, participation, top management support, self-efficacy and self-valence, group efficacy, job knowledge, trust in peers, clear task roles and responsibility, clear expectations and direction from senior management, and top management’s trust in subordinates. Both essential and influential climatic factors are a result of the shared perception of employee readiness at a common multilevel platform.

In the longer term, a higher level of readiness can be potentially sustained if top management considers the full range of identified climatic influential factors, but focuses on the priorities. These influential climatic factors perceived by employees as portraying a certain degree of influence are history, conduciveness to unlearn, job satisfaction, manager/employee relationships, logistic and system support, flexibility in policies and procedures, perceived organisational support, internal customer focus and team processes, and a common understanding of quality and customer requirements.

5.6.10 Readiness as multidimensional

Viewing employee readiness from a multidimensional perspective may help to understand how improvements can be effectively supported for their success. It has been argued that employee readiness is multidimensional and responds along the alignment of the cognitive (belief), affective (feel) and intentional dimensions influenced by the organisational
climate (Piderit, 2000; Holt et al., 2007; Weiner, 2009; Rafferty et al., 2013). The qualitative results indicate how multidimensional readiness can be triggered and influenced by the right conducive climate.

5.6.10.1 Cognitive dimension of employee readiness

The cognitive dimension refers to what the individual believes about the improvement in terms of the need and benefits in order to prepare them to cope with chaos (Pideret, 2000; Oreg, 2006). However, the qualitative result from this study indicate a deeper connection of physical and spiritual values (obligation to God and the government), responding to the cognitive as well as the affective dimension of employee readiness. Most importantly, believing in the trust that top management places on their subordinates is an essential factor that enforces the cognitive level of employee readiness. As indicated by the interviewed participants:

‘Appreciation is one of the factor but the main thing is trust of the top in us to do the job, reflecting that genuine feeling of trust and believing in us that we can do it, that’s the thing that makes me positive, ready.’ (P1.B81)

‘It’s our responsibility. It’s also the Islamic spirituality values that if you do good to the public, the benefits that public get returns to you in blessing. So knowing that belief and the fact that you are making people happy makes you ready. It’s knowing the value of service that you are giving.’ (P1.A22)

‘Simple, management drive as in top management in terms of if … you see the top management being serious about it and you can see it, you believe in it, you are aware of the need to go for ISO, then that will drive you to achieve that goal… Personally, it’s the believe in the ISO, influence by the presentation by the key people who are responsible for bringing in the awareness, to trust in that believe that this is the right thing to be done for the organisation. Once they present to us what is important about ISO and we have that believe, then that’s going to drive us to be ready.’ (P1.B71)
'When somebody gives me a task to do, I take it that they trust and believe in me to do it.' (P1.B42)

5.6.10.2 Affective dimension of employee readiness

The affective aspect of readiness in this study is driven by the feeling of responsibility, the trust of top management in the employees to deliver and that the purpose of the improvement is genuine. The affective dimension is also described as the feeling of wanting to help others, the feeling of obligation and knowing what to do. The affective feeling is fed into the wider environment from individuals to groups, units to sections and sections to departments in the form of support and cooperation. It is important that the affective dimension of employee readiness is aligned with the cognitive and intentional aspects of readiness and translated across the organisation into action through integrative connectedness, collaboration and networking, as indicated by some of the interviewees:

‘It's the sense of wanting to help others that makes us ready to think what is necessary for us to do to carry out the improvement, whether it relates to finding resources, relying on our knowledge, getting the support from the top and our peers, in terms of getting the cooperation and support from them and other units, Departments through networking.’ (P1.B58)

‘It's knowing our responsibility. Even though the work is not related to us but when they ask for help we will be supporting them. The trust given by them to us. ‘Them’ refers to top management. Whoever is giving the instruction. When they trust us, it makes us feel ready. Trusting us to get involve and allow us to participate even if it’s a small job makes us feel ready to support the improvement.’ (P1.A27)

The affective dimension of employee readiness is also triggered and influenced by essential and influential climatic factors. Examples of climatic factors are top management’s trust in subordinates, clear task roles and responsibility, communication and participation. Some of the influential climatic factors mentioned by the interviewees are job knowledge and skills, top management support, trust in peers, clear task roles and
responsibilities and participation. Thus, it is important that the conducive climate responds to the affective dimension of employee readiness, enough to trigger and influence employees to support and act on improvements.

5.6.10.3 Intentional dimension of employee readiness

In this study, the intentional aspect of readiness, which influences the individual or group’s intention to act and support improvement, is triggered and influenced by the desired climatic factors. For example, essential climatic factors such as communication, clear task roles and responsibilities, participation and top management’s trust in subordinates helps to prepare employees for uncertainty and anticipate the challenges. As indicated by the interviewees:

`I think for any improvement, personally for planned, we need to be involve with what is the program for such a planned improvement in the beginning, information to the managers, and if we are only involve halfway, then it is sort like receiving instructions rather than feeling fully participating. Personally, that’s how I feel if I were to support the improvement.’ (P1.A29)

`It’s knowing our responsibility and the trust in us to do it so whatever is mandated to us, we have to do it. One of the thing, if we think of it, if we don’t support the improvement, the benefits will not be achieve for us, the public, the Department in terms of their safety as road users.’ (P1.B59)

For public service organisations to effectively implement improvements, it is necessary for top management to be able to facilitate a conducive climate that reaches the multidimensional aspect of employee readiness.

5.6.11 Findings that differ from previous findings in the literature

Cross-analysis of the qualitative and quantitative data showed a difference in some of the climatic factors previously cited in the literature as being potentially influential to employee readiness. These climatic factors were job demand, conduciveness to unlearn,
management’s opportunity to lead continuous improvement, job satisfaction, logistic and system support, flexibility in policies and procedures, perceived organisational support and internal customer focus and team processes (see Table 7.0).

Table 7.0 Climatic factors that differ from previous arguments in the literature.

<table>
<thead>
<tr>
<th>Climatic factor</th>
<th>Survey</th>
<th>Interview</th>
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<tbody>
<tr>
<td></td>
<td>Planned</td>
<td>Unplanned</td>
</tr>
<tr>
<td>Job demand</td>
<td>57%</td>
<td>42%</td>
</tr>
<tr>
<td>Conduciveness to unlearn</td>
<td>96%</td>
<td>76%</td>
</tr>
<tr>
<td>Manager’s opportunity to lead continuous improvement</td>
<td>95%</td>
<td>84%</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>Logistic and system support</td>
<td>87%</td>
<td>74%</td>
</tr>
<tr>
<td>Flexibility in policies and procedures</td>
<td>90%</td>
<td>61%</td>
</tr>
<tr>
<td>Perceived organisational support</td>
<td>80%</td>
<td>79%</td>
</tr>
<tr>
<td>Internal customer focus and team processes</td>
<td>95%</td>
<td>82%</td>
</tr>
</tbody>
</table>

5.6.11.1 Job Demand

Some researchers have argued that having high job demand increases employees’ readiness to support improvements (Miller et al., 2006; Cunningham et al., 2002). In this study, the results indicate that job demand is perceived as having a small influence on employee readiness (see Table 7.0). This could be because the cognitive and affective senses of responsibility and a selfless mindset overpower the effect of job demand on employee readiness. As one of the participants commented:

‘I think it boils down to the attitude. So, if you’ve positive attitude, so whatever is thrown at you, you’ll take up the challenge.’ (P1.OC.1)

‘To support and do the work, is my experience all this time that is motivating me from the time I was a Technical assistance (TA) and during that time I was supervised and
mentored by my supervisor Mirusin who taught me to do the work in a selfless all-rounder manner, regardless of my level.’ (P1.B85)

‘The most important in emergencies is that we must have a positive mindset and aimed that we must to complete the task, no matter what.’ (P1.B85)

5.6.11.2 Conduciveness to unlearn
Conduciveness to unlearn has been argued in the literature to enhance employees’ readiness for improvement (Becker, 2003; Yusoff, 2005). In this study, the climatic factor of conduciveness to unlearn is perceived as influencing employees’ readiness to support improvement least. However, the survey results showed a high frequency for planned improvement (see Table 7.0). It is speculated that during chaos, the excitement, the sense of responsibility and the urgency creates less time to unlearn or learn new ways. It is a matter of acting immediately in order to survive and the process itself envelopes the learning and unlearning process.

‘Normally, the motivation comes from within, knowing that we can do it, feeling the excitement to face the challenge and is helped by our experience, knowledge and our competency. By accepting the challenge, our experience will increase through learning and increasing our know-how knowledge. If we do it just to avoid from being scolded by our top, then there’s no point to do it in the first place. Whatever that my boss instruct me, I have to do it and this comes from my sense of responsibility.’ (P1.B85)

5.6.11.3 Management’s opportunity to lead continuous improvement
In this study, the qualitative results are considered more reliable, as they reflect the immediate perception close to reality. Management’s opportunity to lead continuous improvement is perceived as being a low priority in affecting employee readiness. However, previous researchers have argued otherwise (Weick, 2003; Burnes, 2004). This can be explained by the highly complex and bureaucratic conditions of the organisational context. However, by being creative, top management has learnt to work around the flexibility of a closed rigid system, driven by their high efficacy and intention to survive and serve. As one of the top manager’s commented:
Knowing in the government sector, there are certain constraints but I’m sure that we can work around the constraints and create the flexibility with the walls and work our way around those constraints.’ (P1.OC.1)

5.6.11.4 Job satisfaction
Job satisfaction has been positively linked to employee readiness in a positive manner (Devos et al., 2002; Probst, 2003; Walsh & Deery, 2006). However, the results from this study showed otherwise, except for the survey results for planned and unplanned improvements, which showed 99% and 100% (see Table 7.0). The potential of job satisfaction as the influential factor for employees’ readiness under planned and unplanned improvement as reflected in the survey results, may be rooted in the long-term rewards in terms of promotion and career development. As one of the top manager commented,

‘I think commitment from everybody. Because in the Government sector, you always feel that you have to do it for some reason. I think for them, at the end of the day, it’s the reward. It comes back to promotion, recognition and their careers.’ (P1.OC.3)

In explaining the low frequency results from the qualitative study results for unplanned improvements (see Table 7.0), employees’ readiness in the Brunei context is deeply influenced by their responsibility and obligation to their religion and monarch; thus, their job satisfaction goes deeper into their spiritual satisfaction regardless of their frustrations about their job. Brunei’s administrative and working cultures are highly governed by the concept of ‘Malay Islamic Monarchy’ which revolves around the strong religious faith, loyalty to the Monarch and a desire for a sustainable National development growth. The obedient nature of Brunei employees is influenced by the Ahli Sunnah Wal Jamaah Islamic teachings, the preservation of Brunei as Malay Islamic country and the need for continuous effort towards ensuring the harmony, safety and welfare of the people. Towards sustaining the quality of life for the people of Brunei, all levels of ‘autonomy’ within the Ministries and Departments are geared in a united effort through the obedience and readiness of employees. The efforts are to ensure a continuous National development growth brought
about by the success and sustainability of improvements under the Departmental and National Development Plan. Thus, the job satisfaction level for Brunei employees goes beyond the physical feeling of improvement achievements but their readiness is also driven by the spiritual cognitive and affective satisfaction of improvement achievement. Enjoying the task is also important. As one of the participants commented:

‘I think myself, I see myself always feel ready, always obedient and become very knowledgeable because they tend to give you the job … I think for me I do it for spiritual reason, your obligation to complete the task, provided its clear.’ (P1.C122)

‘My first director use to say whatever I do, I’ve to enjoy my work. If you don’t enjoy your work, do you think that all those problems will be gone just like that. It could kill yourself but if you enjoy your work, you get the satisfaction. If you can’t enjoy, force yourself to enjoy because it will make you ready.’ (P1.C122)

‘For me, honestly, firstly, I know my responsibility, its coming from my inner desire to do good to others, spiritually.’ (P1.C119)

5.6.11.5 Logistic and system support

From the literature, logistic and system support has been argued to increase employees’ readiness to support improvements (Nadler, 1981; Eby et al., 2000; Rafferty & Simons, 2006). However, particularly from the interview results in this study, the factor of logistic and system support is perceived by the employees as having only a small effect on their readiness (see Table 7.0). This may be explained by the lack of trust in the reliability and accuracy of the information held by the existing logistic and system support. As some of the participants responded:

‘Firstly, lack of data information from data system where it is supposed to be shared by other units. Especially IT infrastructure is too slow, not updated, not reliable, complacent leading to loss of trust on the system reliability.’ (P1.A19)
'They feel ready if the system is ready.' (P1.A38)

5.6.11.6  Flexibility in policies and procedures
Having flexibility in policies and procedures has been argued to increase employees’ readiness to support improvements (Eby et al., 2000; Rafferty & Simons, 2006). However, the results from this study do not support that argument. Employees in Brunei’s public service organisations are accustomed to the existing policies and procedures set by traditional ways of management. To change or modify the current form of policies and procedures to allow for quick adaptation to complexity may take time. It also involves other agencies and authorities before a decision is made. Thus, flexibility in policies and procedures are perceived as influencing employees’ readiness to support improvements least. As one of the top managers commented:

‘Top management support is crucial but sometimes there’s limitation beyond the top management. Because all of the resources coming from one source so we can only do improvement within the limitation so we cannot do so much in JKR.’ (P1.OC.4)

5.6.11.7  Perceived organisational support
Perceived organisational support relates to the extent to which employees perceive that their organisation values their contribution and cares about their well-being, thus increasing their readiness to support improvements (Eby et al., 2000). Although the survey results show a higher frequency of the influence of perceived organisational support on their readiness for planned improvement, there is low perception level based on the interview and survey results for unplanned improvements (see Table 7.0). It is speculated that employees in the studied context have learnt to be more receptive to constraints and their readiness is rooted in their self-confidence to do the job well to the best of their capability, their reliance on their peers and the feeling of responsibility and spiritual satisfaction. Their responsibility to the public motivates employees to follow improvements through regardless of whether or not they perceive the organisational support as being positive, as long as they have their superior’s trust. As some of the participants commented:
`On the other hand, sharing of information is important. In unplanned, the head of section is always changing and we are tired of this and we have to repeatedly be the informer. It’s already a norm for us up to the point that if we have no leader, we can still do the work. I rely on my self-confidence.’ (P1.C92)

`First of all, it’s our self-confidence and spiritual reason and knowing our sense of responsibility.’ (P1.C93)

`It’s the discipline of doing a task in your best capability. It’s the self-confidence, and our inner spirit. From the top, I don’t mind what they give me, but it has to be clear. I want to make them happy, because it’s coming from my sense of responsibility, my self-confidence, seeing the benefits to myself and the organisation. It’s important that if I can fulfil what they want and make them happy, then I know that I’ll be happy because they trust me to do the present and future job.’ (P1.C116)

The feeling of obedience and responsibility that employees and top managers feel towards the success of improvement is driven by the working culture guided by the National ideology of `Malay Islamic Monarchy’. As long as the instruction and task is clear, the initial readiness that evolves from this working culture forms a united mindset of ensuring the success of improvements. Based on simple rules of maintaining top management’s trust in employees to carry out the improvement, having clear task roles and responsibilities and that the level of communication and participation is sufficient to understand the process of improvement, distributed control is achieved for employees’ to self organise. Thus, all levels of `autonomy’ including engineers, chief technical assistant, supervisors will play a united role driven by their obedience and spiritual values to ensure the success and sustainability of improvements, even with minimum direction from the top managers. Provided that the task is clear, trust is given by top managers and the need for improvements is understood at multiple levels, minimum readiness of employees will be triggered. However, influencial climatic factors are needed to further amplify their readiness level to sustain the improvement.
5.6.11.8 Internal customer focus and team processes

Previous researchers (Dalu & Deshmukh, 2002; Dana, 2004) have argued that having internal customer focus and team processes can enhance employee readiness, as it assures their engagement and alignment of involvement with their immediate manager and peers towards the success of organisational improvement. However, the results from the qualitative study showed a very low frequency of employees’ perception on its relevancy to employee readiness. The quantitative results showed a very high perception level by employees that it affects their readiness. It is speculated from the interviews that employee readiness does not rely on improvement efforts focussed on internal customer focus and team processes. However, their readiness evolves from a high sense of responsibility and is generated within the multilevel hierarchy of the organisation through other influential climatic factors. Such climatic factors are trust, support and commitment from the top, communication and participation. As one of the participants commented:

`One thing is our sense of responsibility and the taskforce is to support the Department. With the small team that we have, there must always be teamwork in terms of their readiness, sometime we don’t wait for the resources, we have to make do with what we have, the willingness to support in every way possible. If there is a weakness, we work together, by having two way communication and participation. There are so many level in the organisation so we have to come down to their level so if they see our commitment at their level and feel that we are with them, this is where they feel ready to support and commit. We work together in a teamwork spirit. We always get top management support, they know our limitation and don’t force us to do something beyond our capability. But the participation at every level in terms of accepting and listening to our ideas increases our sense of belonging. This includes top management.’ (P1.C119)

5.6.12 Surprising findings

The qualitative analysis resulted in the emergence of an additional climatic factor: top management’s trust in subordinates. The high frequency as both an essential and influential factor for employees’ readiness to support improvements is considered in the final stage. In Brunei’s context, it is crucial for employees to feel and acknowledge that they have their
manager’s trust in them for them to feel ready to support improvements. Having their manager’s trust in them by recognising and appreciating their contribution allows subordinates to be creative and innovative on a learning curve without the fear of being blamed when something goes wrong. As some of the participants commented:

‘Maybe I feel 30% ready. The other 70% relies on HRD. This is what I’m trying to get HRD to improve our Department. I try to go there frequently and asked for training, the conduciveness to learn, to increase my confidence. There should be more trust from the top in us in terms of taking our ideas, because sometimes, they don’t listen to us, yet we are always on site. So sometimes, I’ve to drag them to site for them to see and understand what we propose. Trust from the top is important for us, in terms of trusting us and giving opportunity for us to do improvements. I also feel recognition and appreciation is important that would influence my 70% of readiness.’ (P1.B117)

‘The trust of top in us is the root, the driver for me to do work. Sometimes when we don’t get the recognition and appreciation and that upsets me because it gives me the impression that they don’t trust me enough.’ (P1.C115)

5.6.13 Reliability and validity of climatic factors
The Cronbach’s coefficient alpha for all items in the questionnaire is 0.745, thus is acceptable (>0.6 for the initial investigation is acceptable (Nunnally, 1978)). Cronbach’s coefficient alpha for each itemised climatic factor is above 0.6 (see Appendix 8). The validity of the 11 influential climatic factors and four essential factors were further tested in Phase 2 based on the itemised factors. The Pearson product moment correlation between the itemised influential and essential climatic factors with employee readiness was found to be positively significant at the 0.001 level (two-tailed) in the final stage (see Appendix 8).

5.6.14 Development of the final stage survey questionnaire: itemised statement measurements
The outcome of phase 1 study of the identified essential and influential climatic factors are further developed into an itemised statement measuring each climatic factor. These factors
form the final stage of the survey questionnaire content and were tested on a wider coverage of four departments for the participants’ agreement over the measured statements (questionnaire content can be found in Chapter 4, section 4.7.2.3). The reliability and validity of the finalised itemised climatic factors are then tested in the final stage (described in Chapter 6). The sample of the itemised survey questionnaire can be seen Appendix 8.

5.7 CHAPTER SUMMARY

This chapter has presented both the qualitative and quantitative results of the Phase 1 study. Four essential climatic factors were identified: communication, participation, top management’s trust in subordinates and clear task roles and responsibility. Eleven dominant influential climatic factors were identified to be communication, participation, top management support, trust in top management, self-efficacy and self-valence, group efficacy, job knowledge and skills, clear task roles and responsibilities, clear expectations and direction from top managers, trust in peers and top management’s trust in subordinates. Both essential and influential climatic factors correspond to a synergy of planned and unplanned improvement. The Phase 1 results both support and differ from the results of previous studies in the literature, leading to specific conclusions in Brunei’s context. The results show the important inter-linkages between the organisational climate, employee readiness at a multilevel and multidimensional level and understanding the characteristics of organisations as being complex and adaptive. The Phase 1 results demonstrate the conduciveness that is needed to allow for employee readiness to evolve within a complex and adaptive organisation. The developed survey questionnaire that contained the itemised climatic factors were tested for the participants’ agreement on the measured statements across four departments of the Public Works Department, which is further described in the following chapter.
CHAPTER 6 – PHASE 2 STUDY (DATA PRESENTATION, ANALYSIS AND RESULTS)

6.0 CHAPTER OVERVIEW
This chapter outlines the data collection, analysis and findings of the Phase 2 study. Phase 2 is a result of employees’ agreement on the itemised climatic factors developed from the Phase 1 findings (presented in Chapter 5). This chapter provides specific details of the final testing, the research participants, data analysis and the findings. The summarised structure of this chapter is outlined in Figure 6.0.

Figure 6.0 Structure of Chapter 6.
6.1 CHAPTER INTRODUCTION
This chapter describes in detail the resulting data, analysis and findings of phase 2 study. A survey questionnaire containing itemised statements measuring each climatic factor was tested for participants’ agreement. Due to time constraints and the employees’ availability, the survey was distributed ad hoc during working hours on a one-to-one basis in small arranged sessions. The results from the quantitative study, involving 665 respondents across four public service organisations, were statistically analysed for their reliability and validity. The four organisations in the Public Works Department are the Water Services Department, the Road Department, the Drainage and Sewerage Department and the Technical Services Department. The background of these organisations is discussed in Chapter 4, section 4.9. The results of the study confirm the hypothesis that there is a positive relationship between the dominant climatic factors and employee readiness at a multidimensional level (i.e. cognitive, affective and intentional). Essential and influential factors were identified which answers the research question. The outcome of the conceptual readiness climate framework and working model demonstrates extended knowledge how employees’ readiness can be triggered and influenced to support improvements in the public service. The empirical evidence presented in this chapter as a result of Phase 2 study are based on employees’ perception of the desired climate that are found to be reliable and valid that affects employees’ readiness in a multidimensional level for effective improvements.

6.2 SAMPLING AND UNIT OF ANALYSIS
As improvements affect a wide spread of multilevel organisational employees across the four organisations, sampling covered all of the improvement agents and employees stationed at the head office in the capital, Bandar Seri Begawan. A list of names and their positions were provided by the focal person in each organisation; however, the names of the respondents are kept confidential. The majority of the employees were involved as task members across the four organisations, thus the unit of analysis was taken at the organisational level, relying on a shared perception from a multilevel perspective, i.e. individual, team member and the organisation. Participants were categorised as topmanagers, middlemanagers and non-managers.
6.3 RESPONSE RATE AND DATA PREPARATION

The survey questionnaire for Phase 2 (see Appendix 5) was distributed to 672 members of staff in the four organisations involved in the support and implementation of improvements. The response rates achieved in each organisation are outlined in Table 8.0.

Table 8.0 Response rate from the four departments (Phase 2 study).

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>TOTAL</th>
<th>RESPONDENTS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Services Department</td>
<td>350</td>
<td>304</td>
<td>87%</td>
</tr>
<tr>
<td>Road Department</td>
<td>150</td>
<td>121</td>
<td>81%</td>
</tr>
<tr>
<td>Drainage and Sewerage Department</td>
<td>70</td>
<td>57</td>
<td>81%</td>
</tr>
<tr>
<td>Technical Services Department</td>
<td>205</td>
<td>183</td>
<td>89%</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td><strong>775</strong></td>
<td><strong>665</strong></td>
<td><strong>86%</strong></td>
</tr>
</tbody>
</table>

A total of 665 responses from all four organisations were achieved, providing an overall response rate of 86%. All data were transferred into the Statistical Package for Social Science (SPSS) version 19 software from an Excel file. The data were then reviewed for abnormalities and omissions. All data were found to be usable and the questionnaire contents were fully filled. The participants clearly understood the questionnaire contents and were voluntarily enthusiastic.

6.4 DEMOGRAPHICS

The participants’ demographic information relates to section 1 of phase 2 survey questionnaire. The data is needed to ensure a good sample covering the right participants (i.e. improvement agents), their collective knowledge and experience over their service age and depends on the authoritative power they hold, which may affect their readiness to a certain degree. Demographic data are presented in the following sub sections.
6.4.1 Gender

In summary, of the 665 respondents in the four organisations, 55.6% were male and 44.3% were female. It is speculated that there are no gender issues within the Public Works Department; some of the higher posts, including deputy director general, assistant directors and senior executive managers, are held by females. In addition, throughout the interview session in this study, no respondents mentioned any constraint or climatic factor issues related to gender that affects their readiness to support improvements.

In Brunei Darussalam, the role of women is viewed as vital, in caring for the family, as well as contributing to the socio-economic development of the nation. Women’s participation in the labour force has increased to 58% in 2010. Equal opportunities for women’s participation in the work force and nation building, including in the formulation of policies and programmes of the country is emphasised under the Nation’s vision 2035. The Government of Brunei Darussalam continues to undertake several measures to achieve a work life harmony and balance under a National Plan of Action for Women. The aim is to ease the burden of dual responsibilities of women who work full time and carrying out the responsibilities as mother and wife (Brunei’s technical report, East Asia Gender Equality Ministerial Meeting 2011).

In Brunei’s society, women participation in economic development has contributed positively to national development growth and the prosperity of the nation. According to Public Service Department report, women outnumbered men by 200 in the public sector (Brunei Times, 2011). National efforts strategised within the National Development Plan 2007-2012 may explain for the increased participation level of women in national development growth. Increased opportunities are given to women to hold higher positions in the public and private sectors. Women in Brunei constitute 50% of the civil service population where 28% are at the level of policy makers, senior officials, managers and legislators. Women are given equal rights and opportunities in education, training, healthcare, employment, business, and ownership of assets, benefits and citizenship including work careers that contributes to the nation’s growth and prosperity. Women employees in Brunei earn the third highest income in the world and are given the same work terms and fringe benefits as the male counterparts. In addition, the provision of 105
days of paid maternity leave, free healthcare and education as well as access to nursery schools and children facilities has facilitated women’s participation in the government service (Brunei Times, 2012). Due to the high level of opportunities given to women employees in Brunei, gender issues are speculated to be minimal if not non-existent in the civil service.

6.4.2 Taskforce
Of the 665 respondents, 89% work as part of a team or taskforce and 11% work individually. The high percentage of participants that work as team members evolves from top management’s strategy to inculcate the teamwork culture of a multi-skilled and multifunctional organisation that is able to adapt and be more resilient to challenges. Thus, majority of the participants in this study express their views based on their multilevel perception as an individual and group member (refer to Chapter 5, section 5.6.9 for further explanation).

6.4.3 Age
Of the 665 respondents, 56.6% are 26–45 years of age. It was speculated that the level of work knowledge and experience as well as the participants’ age has an impact on their readiness. Thus, the data on age was gathered in order to understand the group of respondents. New regulations for late retirement at the age of 60, compared to the previous age of 55, were set in 2010. Table 9.0 shows an unequal distribution of age demographic pattern. A decrease in new post being created from previous years may explain for the low percentage of new employees between 18 to 25 years of age being enrolled into Public Works Department. A larger percentage of respondents between 26 to 45 years of age formed the middle aged employees whom have stayed loyal with Public Works Department, influenced by Government benefits, sense of financial security and the achievements felt from serving the public. The small percentages of 13.4 % of respondents retiring in the next few years at the age of 55 comprise of the ‘dictionary man’, the most experienced employees and some of the improvement champions. These groups include the director generals, deputy director generals, some of the directors and assistant directors,
senior executive engineers and mature engineers. These groups are the prominent key players in the planning, management and operational service system. They also reflect the group, which believes in mentorship in order that the next generation can learn the skills to adapt and survive the increasing challenges. Thus, grooming and mentoring the next successor through successive planning and acquiring the right leadership qualities forms a challenge for top management in order that the organisation may evolve in a learning environment. Table 9.0 shows the distribution of the respondents’ age groups.

Table 9.0 Distribution of age groups of respondents.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent (n=665)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 years of age</td>
<td>6.3%</td>
</tr>
<tr>
<td>26-45 years of age</td>
<td>56.6%</td>
</tr>
<tr>
<td>46-50 years of age</td>
<td>23.7%</td>
</tr>
<tr>
<td>51-60 years of age</td>
<td>13.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

6.4.4 Qualifications

Referring to Table 10.0, of 665 respondents, only 4.4% have acquired a qualification above degree level; 5.2% of the respondents have acquired a degree, which qualifies them as future managers and improvement agents; 16.1% have acquired a diploma; and a large percentage, 74.3%, have qualification below diploma level. The inadequate percentage of qualified skilled staff (25.7%) reflects the expression of the major frustration and stress of the top and middle managers to deal with the 74.3% less qualified group. It is speculated from the interview sessions that even though 98.2% of the respondents feel ready to support improvements, they may not have the competency or confidence to act. As 74.3% of them are lower skilled or less qualified to cope with the advancement of technology and innovativeness. The top managers highlighted the need for mentoring skills to encourage and motivate the readiness of this group to adapt to complexity.
Table 10.0 Frequency of qualification distribution.

<table>
<thead>
<tr>
<th>HIGHEST QUALIFICATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters and above</td>
<td>4.4%</td>
</tr>
<tr>
<td>Degree</td>
<td>5.2%</td>
</tr>
<tr>
<td></td>
<td>25.7%</td>
</tr>
<tr>
<td>Diploma</td>
<td>16.1%</td>
</tr>
<tr>
<td>Diploma below</td>
<td>74.3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

6.4.5 Job Clarification

Of the 665 respondents, 6% are top managers (directors and assistant directors), 21.9% are middle managers (senior executive engineers, executive engineers, engineers, chief technical assistants) and 77.3% are non-managers (senior technical assistants and below). The result show similar trend to those interviewed in phase 1 study. This sets the criteria for the research sample to cover the majority of the middle (senior management) and non-managers (operational level) within the organisation.

6.4.6 Service

Referring to Table 11.0, of 665 respondents, 22.7% fell within the range of having less than five years’ service, 14.7% had five to ten years’ service and 62.5% had more than ten years’ service. Acquiring knowledge and experience over their years of service may contribute to their confidence and readiness level.

Table 11.0 Frequency of range of service.

<table>
<thead>
<tr>
<th>SERVICE AGE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>22.7%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>14.7%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>62.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>
6.4.7 Current position

Of 665 respondents, 48% have been in their current position for more than ten years (older group), 21% have been in their current position for five to ten years and 31%, including the younger generation and those higher level managers that had recently been promoted, have been in their current position for up to five years. The high percentage of respondents that have been in their current post for up to five years may be explained by the recent improvements in the administrative system in the last year, which largely involved reshuffling and promoting higher levels of managers. There has also been a decrease in new posts and the enrolment of new staff in the organisation. The large percentage of respondents (48%) which comprise the older group may reflect a lower readiness to act, however much they believe in the improvements. This is speculated to previous experience (history) of failed improvements and inconsistent support from top management. Table 12.0 shows the number of years the respondents have spent in the organisation in their current position.

Table 12.0 Frequency of range of years in current position.

<table>
<thead>
<tr>
<th>YEARS IN CURRENT POSITION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 10 years</td>
<td>48%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>21%</td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>31%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

6.4.8 Background Information

This analysis reports information relating to the nature of improvement experienced in the last year prior to the conduct of this study and the existing level of employee readiness. The current pattern of the nature of improvement currently experienced will lead to determining the studied criteria close to reality.
6.4.8.1 Planned Improvement
In the survey, the respondents were also asked the frequency of planned improvements they had experienced during the previous year. Of 665 respondents, 54.8% had experienced improvement less than twice and 43.2% had experienced planned improvement more than twice. It is speculated that recent reshuffling activities have placed additional pressure on new managers to exert new ways of management through improvement initiatives.

6.4.8.2 Unplanned improvement
Of 665 respondents, 19.2% had experienced unplanned improvement less than twice, 35.6% had experienced unplanned improvement between two and five times and 27.6% had experienced unplanned improvement more than five times in the last year. As speculated from the interview sessions, the organisation is experiencing an increase in unplanned improvements, brought about by internal and external factors. There have been unanticipated recent administrative improvements and problems induced by irregular climate changes, i.e. flooding, landslides and drought. The urgency of new managers to survive the challenges through effective improvements heavily relies upon the positive readiness and adaptability of the organisational workforce. New ways of thinking and approaches are replacing traditional ways, which are no longer applicable to cope with complex challenges.

6.4.8.3 Existing level of employee readiness
Of 665 respondents, 98.2% expressed their readiness to support their organisational improvements. Supported by the interview results, it is speculated that the embedded philosophy of ‘Melayu Islam Beraja’, meaning the ‘Malay Islamic Monarchy’ concept in Brunei’s absolute monarch governed organisations’, in the working culture may explain the high level of employees’ obedience and sense of responsibility to the monarchy and religion. Thus, the national context may have an effect on employee readiness, emphasising the need for research into climatic factors under different national or organisational contexts. Only 1.7% of the respondents were unsure of their readiness, mainly due to their holding a new post in the organisation.
6.5 DESCRIPTIVE FINDINGS – DATA PRESENTATION

The descriptive analysis indicates that, overall, the majority of the participants agreed with all the dominant influential and essential itemised climatic factors and the three dimensional measurements of employee readiness. Table 13.0 shows the frequency in terms of percentage of those agreeing and strongly agreeing to all the factors.

Table 13.0 Descriptive data

<table>
<thead>
<tr>
<th>No.</th>
<th>Climatic Factors</th>
<th>Percentage (average means of item)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantitative results</td>
<td>Agree (43.8%)</td>
</tr>
<tr>
<td></td>
<td>CLIMATIC FACTORS</td>
<td>Strongly Agree (54.5%)</td>
</tr>
<tr>
<td>1.</td>
<td>Trust in top management (3 items)</td>
<td>43.8%</td>
</tr>
<tr>
<td>2.</td>
<td>Communication (6 items)</td>
<td>45.3%</td>
</tr>
<tr>
<td>3.</td>
<td>Participation (5 items)</td>
<td>42.5%</td>
</tr>
<tr>
<td>4.</td>
<td>Top management support (5 items)</td>
<td>42.9%</td>
</tr>
<tr>
<td>5.</td>
<td>Self-efficacy and self-valence (6 items)</td>
<td>46%</td>
</tr>
<tr>
<td>6.</td>
<td>Group efficacy (4 items)</td>
<td>47%</td>
</tr>
<tr>
<td>7.</td>
<td>Clear task role and responsibility (3 items)</td>
<td>45.4%</td>
</tr>
<tr>
<td>8.</td>
<td>Clear expectation and direction (2 items)</td>
<td>46.9%</td>
</tr>
<tr>
<td>9.</td>
<td>Trust in peers (5 items)</td>
<td>42%</td>
</tr>
<tr>
<td>10.</td>
<td>Job knowledge (2 items)</td>
<td>50.2%</td>
</tr>
<tr>
<td>11.</td>
<td>Top management trust in subordinates (3 items)</td>
<td>41.7%</td>
</tr>
<tr>
<td></td>
<td>READINESS FACTOR</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Readiness (emotional – 3 items)</td>
<td>45.3%</td>
</tr>
<tr>
<td>13.</td>
<td>Readiness (intentional – 3 items)</td>
<td>42.9%</td>
</tr>
<tr>
<td>14.</td>
<td>Readiness (cognitive – 2 items)</td>
<td>39%</td>
</tr>
</tbody>
</table>

Table 14.0 provides detailed frequency results of the participants’ agreement with the itemised statements measuring each climatic factor.

Table 14.0: Detailed percentages of itemised measurement statements for the identified climatic factors.

1-Strongly disagree, 2-Disagree, 3-Not sure, 4-Agree, 5-Strongly agree

<table>
<thead>
<tr>
<th>Itemised climatic factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Top management trust (3 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top management trust 1:</td>
<td>0.3%</td>
<td>0.5%</td>
<td>1.5%</td>
<td>42.2%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Top management trust 2:</td>
<td>0%</td>
<td>0%</td>
<td>0.9%</td>
<td>49.4%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Top management implements policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top management trust 3:</td>
<td>0%</td>
<td>0.3%</td>
<td>1.4%</td>
<td>39.6%</td>
<td>58.6%</td>
</tr>
<tr>
<td>Top management is fair, honest, sincere and unbiased</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. Communication (6 items)

| Communication 1: | 0% | 0% | 0.5% | 39% | 60.4% |
| The two-way communication between top management and subordinates is very good | |
| Communication 2: | 0% | 0% | 0.8% | 52% | 47.1% |
| I am informed of how improvement is going | |
| Communication 3: | 0% | 0% | 1.2% | 47.4% | 51.2% |
| Clear how objectives of improvement are put in practice | |
| Communication 4: | 0% | 0.3% | 0.9% | 47.9% | 50.8% |
| Good communication between management team and staff members concerning plans for improvement | |
| Communication 5: | 3.8% | 12.2% | 18.2% | 33.5% | 32.3% |
| Information does not reach us | |
| Communication 6: | 0% | 0.8% | 1.8% | 51.5% | 45.8% |
| We are sufficiently informed of progress | |

### 3. Participation (5 items)

| Participation 1: | 0% | 0.2% | 1.4% | 48.2% | 50.2% |
| Improvements are always discussed with staff | |
| Participation 2: | 0% | 0.3% | 0.9% | 48.5% | 50.2% |
| Decisions are discussed with affected staff | |
| Participation 3: | 0% | 0.3% | 0.3% | 43.4% | 55.9% |
| Frontlines and operational staff can raise issues | |
| Participation 4: | 0% | 0% | 0.2% | 34.2% | 65.5% |
| Work problems and ideas are openly discussed | |
| Participation 5: | 0% | 0% | 1.4% | 38% | 60.5% |
| It is possible to talk about outdated regulations and ways of working | |

### 4. Top management support (5 items)

| Top management support 1: | 0% | 0.2% | 0.9% | 42.9% | 55.9% |
| Top management supports unconditionally | |
| Top management support 2: | 0% | 0.2% | 0.5% | 41.6% | 57.7% |
| Top management is actively involved | |
| Top management support 3: | 0% | 0.8% | 1.2% | 44.1% | 53.8% |
| Top management coaches us well | |
| Top management support 4: | 0% | 0.5% | 1.1% | 39.6% | 58.7% |
| Top management and senior management portray good leadership | |
| Top management support 5: | 0% | 0.6% | 1.2% | 46.5% | 51.5% |
| Top management provides sufficient attention to personal staff consequences | |
### 5. Self-efficacy (5 items)

<table>
<thead>
<tr>
<th>Self-efficacy</th>
<th>Statements</th>
<th>0%</th>
<th>0.3%</th>
<th>0.3%</th>
<th>50.9%</th>
<th>48.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-efficacy 1:</strong></td>
<td>I feel I can handle it with ease</td>
<td>0%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>50.9%</td>
<td>48.2%</td>
</tr>
<tr>
<td><strong>Self-efficacy 2:</strong></td>
<td>I have the skills to make improvement work</td>
<td>0%</td>
<td>0%</td>
<td>2.4%</td>
<td>49.1%</td>
<td>48.3%</td>
</tr>
<tr>
<td><strong>Self-efficacy 3:</strong></td>
<td>I do not anticipate any problems adjusting to work</td>
<td>0.5%</td>
<td>0.6%</td>
<td>2.3%</td>
<td>51.2%</td>
<td>45.3%</td>
</tr>
<tr>
<td><strong>Self-efficacy 4:</strong></td>
<td>When I set my mind to it, I can learn everything</td>
<td>0%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>44.7%</td>
<td>54.4%</td>
</tr>
<tr>
<td><strong>Self-efficacy 5:</strong></td>
<td>My past experience make me confident</td>
<td>0%</td>
<td>0%</td>
<td>0.2%</td>
<td>43.5%</td>
<td>56.2%</td>
</tr>
</tbody>
</table>

| Self-valence 1: | The improvements will increase my feelings of accomplishment                | 0%  | 0.2% | 0%   | 37.4% | 62.3% |

### 6. Group efficacy

<table>
<thead>
<tr>
<th>Group efficacy</th>
<th>Statements</th>
<th>0%</th>
<th>0%</th>
<th>0.6%</th>
<th>44.7%</th>
<th>54.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group efficacy 1:</strong></td>
<td>We feel our group can handle it</td>
<td>0%</td>
<td>0%</td>
<td>0.6%</td>
<td>44.7%</td>
<td>54.5%</td>
</tr>
<tr>
<td><strong>Group efficacy 2:</strong></td>
<td>We have the skills that are needed</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>47.7%</td>
<td>51.2%</td>
</tr>
<tr>
<td><strong>Group efficacy 3:</strong></td>
<td>We anticipate problems adjusting to the work</td>
<td>0%</td>
<td>1.2%</td>
<td>1.5%</td>
<td>51.4%</td>
<td>45.8%</td>
</tr>
<tr>
<td><strong>Group efficacy 4:</strong></td>
<td>When we set our mind to it, we can learn everything</td>
<td>0%</td>
<td>0%</td>
<td>0.5%</td>
<td>43.4%</td>
<td>55.9%</td>
</tr>
<tr>
<td><strong>Group efficacy 5:</strong></td>
<td>Our past experience makes us confident</td>
<td>0%</td>
<td>0%</td>
<td>0.8%</td>
<td>47.9%</td>
<td>51.2%</td>
</tr>
</tbody>
</table>

### 7. Clear task roles and responsibilities

<table>
<thead>
<tr>
<th>Clear tasks roles and responsibilities</th>
<th>Statements</th>
<th>0%</th>
<th>0.2%</th>
<th>0.3%</th>
<th>45.9%</th>
<th>53.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clear tasks roles and responsibilities 1:</strong></td>
<td>I know what is expected of me at work</td>
<td>0%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>45.9%</td>
<td>53.5%</td>
</tr>
<tr>
<td><strong>Clear tasks roles and responsibilities 2:</strong></td>
<td>My task role and responsibility is clearly explained</td>
<td>0%</td>
<td>0%</td>
<td>0.3%</td>
<td>43.5%</td>
<td>56.0%</td>
</tr>
<tr>
<td><strong>Clear tasks roles and responsibilities 3:</strong></td>
<td>My commitment comes from knowing my task role and responsibility</td>
<td>0%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>46.8%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

### 8. Clear expectations and direction from top management

<table>
<thead>
<tr>
<th>Clear expectations and direction from top management</th>
<th>Statements</th>
<th>0%</th>
<th>0%</th>
<th>1.2%</th>
<th>48.2%</th>
<th>50.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clear expectations and direction from top management 1:</strong></td>
<td>My top and senior management informs me of their expectations and provides direction</td>
<td>0%</td>
<td>0%</td>
<td>1.2%</td>
<td>48.2%</td>
<td>50.5%</td>
</tr>
<tr>
<td><strong>Clear expectations and direction from top management 2:</strong></td>
<td>My task is clearly explained and directed by top management</td>
<td>0%</td>
<td>0%</td>
<td>0.5%</td>
<td>45.6%</td>
<td>53.8%</td>
</tr>
</tbody>
</table>

### 9. Trust in peers

<table>
<thead>
<tr>
<th>Trust in peers</th>
<th>Statements</th>
<th>0%</th>
<th>0%</th>
<th>0.3%</th>
<th>43.5%</th>
<th>56.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trust in peers 1:</strong></td>
<td>There is cooperation and teamwork among peers</td>
<td>0%</td>
<td>0%</td>
<td>0.3%</td>
<td>43.5%</td>
<td>56.0%</td>
</tr>
<tr>
<td><strong>Trust in peers 2:</strong></td>
<td>I have the support of my peers</td>
<td>0%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>42.3%</td>
<td>57.1%</td>
</tr>
</tbody>
</table>

191
| Trust in peers 3: | We are encouraged to work with other department staff | 0.3% | 0.8% | 3.6% | 42.8% | 52.4% |
| Trust in peers 4: | Working with my peers is excellent and trustworthy | 0% | 0.2% | 0.8% | 38% | 61% |
| Trust in peers 5: | When something goes wrong, we look at the way we work rather than blaming others | 0.2% | 0.2% | 0.9% | 43.2% | 55.4% |

| 10. Job knowledge and skills |  |
| Job knowledge and skills 1: | I have the knowledge and skills to make improvement work | 0% | 0.2% | 2.3% | 50.2% | 47.3% |
| Job knowledge and skills 2: | Job information is readily available and accessible | 0% | 0.8% | 3.0% | 50.2% | 45.9% |

| 11. Top management’s trust in subordinates |  |
| Top management’s trust in subordinates 1: | Top management trusts me to do the job well | 0% | 0% | 0.8% | 41.3% | 57.8% |
| Top management’s trust in subordinates 2: | Top management trusts my competency, judgement and decision-making when implementing the improvement | 0% | 0% | 0.3% | 42.6% | 56.9% |
| Top management’s trust in subordinates 3: | Top management appreciates and recognises my contribution to the improvement | 0.2% | 0.2% | 0.6% | 41.1% | 57.7% |

| 1. Readiness (emotional) |  |
| Readiness (emotional) 1: | I find improvement refreshing | 0% | 0.3% | 1.1% | 47.3% | 51.2% |
| Readiness (emotional) 2: | I have a good feeling about improvement | 0% | 0.3% | 0.9% | 46.1% | 52.6% |
| Readiness (emotional) 3: | I experience improvement as positive | 0% | 0% | 0.3% | 42.5% | 57.1% |

| 2. Readiness (cognitive) |  |
| Readiness (cognitive) 1: | Most improvements that are supposed to solve problems will make an impact | 0% | 0.3% | 2.6% | 45.2% | 51.8% |
| Readiness (cognitive) 2: | Overall, proposed improvements are for the better | 0% | 0% | 0.2% | 32.7% | 67.0% |

| 3. Readiness (intentional) |  |
| Readiness (intentional) 1: | I am willing to make a significant contribution | 0.2% | 0% | 0.6% | 42.0% | 56.9% |
| Readiness (intentional) 2: | I want to devote myself to the process of improvement | 0% | 0% | 0.3% | 43.7% | 55.9% |
| Readiness (intentional) 3: | I am willing to put energy into the process | 0% | 0% | 0.5% | 42.9% | 56.5% |

1=Strongly disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly agree
6.6 STATISTICAL ANALYSIS FINDINGS IN THE FINAL STAGE

Results of statistical analysis are presented

6.6.1 Reliability results for the climatic itemised scales

The Cronbach’s alpha result for the itemised influential climatic factors is 0.943 and for the essential factors is 0.922. The Cronbach’s alpha, which is greater than 0.8 (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990)), is considered acceptable and found to be highly reliable; thus, these items were retained to be used in further analysis. Further factorisation is conducted to identify any significant patterns for the influential factors.

6.6.2 Principal component analysis

Principal component analysis (PCA) was conducted on all items measuring the organisational influential climatic factors influencing readiness (independent variables) and the multidimensional readiness factor (dependent), which form the content of the questionnaire. Principal component analysis is a form of factor analysis used to explore previously unknown groupings of variables to seek underlying patterns, clustering and groups. Principal component analysis also transforms all the variables into a set of composite variables that are not correlated with one another (Cohen et al., 2007). Key factors or components were identified from the data analysis and the results are described in the following sections.

6.6.3 Testing for factorability

Factorability is a form of test to determine the extent to which data is suitable for factorability. The Kaiser-Meyer-Olkin (KMO) test was used as a first step to measure the sampling adequacy, followed by Barlett’s test of Sphericity. The KMO measures the degree to which intercorrelations exist amongst variables, therefore making the data appropriate for factorability. Barlett’s test of Sphericity provides the probability that the correlation matrix has significant correlation among at least some of the variables. The results for both climatic factors (independent variables) and readiness factors (dependent variables) are shown in Table 15.0 and Table 16.0.
Table 15.0 KMO and Barlett’s test results for influential climatic factors (independent variables).

KMO and Barlett’s Test Results for Climatic Factors

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>26636.673</td>
</tr>
<tr>
<td>Df</td>
<td>1378</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 16.0 KMO and Barlett’s test results for readiness factors (Dependent variables)

KMO and Barlett’s Test Results for Readiness Factors (Dependent variables)

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.935</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>3772.394</td>
</tr>
<tr>
<td>Df</td>
<td>28</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The Kaiser-Meyer-Olkin range between 0 and 1, a result of 0.974 (above 0.7 is considered acceptable) for the influential climatic factors and 0.935 for the readiness factor in this case, shown above is considered acceptable (Hair (Jnr) et al., 2006). This indicates that there is a high level of intercorrelation between the variables or items, making them appropriate for factor analysis. Barlett’s Test is also high, indicating that there is a correlation between at least some of the items in the correlation matrix. This reinforces that the items within the survey are acceptable for factor analysis.

6.6.4 Factor analysis results

In order to obtain a conceptually similar and significant cluster of subscales, principal component analysis with varimax rotation and Kaiser Normalization was conducted. Eigenvalues equal or greater than 1.00 were extracted. Loading greater than 0.4 on each factor was considered to be clean and any loadings of 0.4 or greater on more than one factor were removed. After iterative factorisation to achieve clean loadings in relation to the 48 items used, orthogonal rotation of the variables or items yielded four factors or components under climatic factors, accounting for 21.145 (Factor 1), 15.003 (Factor 2), 14.665 (Factor 3), 10.999 (Factor 4) of the total variance respectively, a total of 61.812% of the total variance explained. The factor loadings are represented in Table 18.0.
Under climatic factors, to enhance the interpretability of the factors, only items with factor loadings as follows were selected for inclusion in their respective factors: > 0.555 (Factor 1), >0.417 (Factor 2), >0.405 (Factor 3), >0.613 (Factor 4), for which the emerging factors are yet to be named. Twenty-eight items were retained for further analysis.

In relation to the readiness factor, principal component analysis with varimax rotation and Kaiser Normalization was also conducted. With regard to the eight items used under the readiness factor on a three-dimensional level, namely cognitive, emotional and intentional, only one component emerged with clean loadings on all items. Thus, all items are retained to be used for further analysis.

A scree test of climatic factors was also conducted to show a graphical presentation of the Eigenvalues of each of the factors extracted. The results are shown in Figure 6.1. When using the scree plot, obvious discontinuities or ‘bend in the elbow’ is observed from the data (after Factor 1) to determine the number of factors considered to be retained. The retained factors will be the ones above the bend. Where the drop flattens out indicates very clearly which factors account for a lot of variance and which account for little. Within the scree test, four major influential climatic factors can be identified. After this point, the drop tends to flatten (see Figure 6.1).
6.6.5 Emerging factors

Loadings are shown in Table 17.0. It is recommended that all item loading into only one factor of 0.4 or greater can be considered to be unidimensional (Coakes et al., 2006). Those that load on more than one factor are considered to be multidimensional and if used with further analysis may have the potential to be problematic when interpreting the results (Singh & Smith, 2000). Any items which fell into this category were identified and given further consideration prior to inclusion in any analysis. The rationale for item retention is explained further in the discussion of the factors. From the results, 17 items that load greater than 0.4 on more than one factor were excluded.
They are:

1. Communication 2 – I am regularly informed how improvement is going.
2. Communication 5 – Information concerning the improvement does not reach us.
3. Communication 6 – We are sufficiently informed of the progress of improvements.
4. Participation 1 – Improvements are always discussed with the staff concerned.
5. Participation 2 – Decisions concerning improvement are discussed with affected staff members.
6. Top management support 2 – The top and senior management are actively involved with the improvement.
7. Top management support 3 – The top and senior managers coach us very well about implementing improvement.
8. Top management support 4 – The top and senior management are able to portray good leadership to suit the improvement.
9. Group efficacy 4 – When we set our mind to it, we can learn anything.
10. Clear task role 1 – I know what is expected of me at work.
11. Clear task role 2 – My task role and responsibility at work is clearly explained.
12. Clear task role 3 – My commitment comes from knowing my task role and responsibility.
13. Clear expectations and direction from the top and senior managers 2 – My task is clearly explained and directed by the top and senior managers.
14. Trust in peer 1 – There is cooperation and teamwork among my peers/colleagues.
15. Trust in peer 2 – I had the support of my peers/colleagues during the improvement.
16. Trust in peer 3 – We are encouraged to work with staff in other departments to solve problems.
17. Job knowledge 1 – I have the knowledge and skills to make this improvement work.
Table 17.0: Clean loadings after some items have been removed

Rotated Component Matrix*  

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Groupeff2) We have the skills that are needed</td>
<td>.727</td>
<td>.205</td>
<td>.231</td>
<td>.159</td>
</tr>
<tr>
<td>(Selfeff2) I have the skills to make improvement work</td>
<td>.724</td>
<td>.232</td>
<td>.214</td>
<td>.157</td>
</tr>
<tr>
<td>(Groupeff1) We feel our group can handle it</td>
<td>.696</td>
<td>.203</td>
<td>.315</td>
<td>.179</td>
</tr>
<tr>
<td>(Selfeff5) My past experience makes me confident</td>
<td>.694</td>
<td>.139</td>
<td>.303</td>
<td>.251</td>
</tr>
<tr>
<td>(Selfeff4) When I set my mind to it, I can learn everything</td>
<td>.686</td>
<td>.096</td>
<td>.303</td>
<td>.233</td>
</tr>
<tr>
<td>(Selfeff1) I feel I can handle it with ease</td>
<td>.658</td>
<td>.253</td>
<td>.179</td>
<td>.284</td>
</tr>
<tr>
<td>(Selfeff3) I do not anticipate any problems adjusting to work</td>
<td>.633</td>
<td>.195</td>
<td>.145</td>
<td>.267</td>
</tr>
<tr>
<td>(Groupeff3) We anticipate problems adjusting to the work</td>
<td>.611</td>
<td>.296</td>
<td>.200</td>
<td>.132</td>
</tr>
<tr>
<td>(Groupeff5) Our past experience makes us confident</td>
<td>.585</td>
<td>.218</td>
<td>.378</td>
<td>.183</td>
</tr>
<tr>
<td>(Jobknowledge2) Job Information is readily available and accessible</td>
<td>.555</td>
<td>.342</td>
<td>.333</td>
<td>.130</td>
</tr>
<tr>
<td>(Topmgtrtrust2) Top mgt implement policies</td>
<td>.181</td>
<td>.790</td>
<td>.136</td>
<td>.085</td>
</tr>
<tr>
<td>(Topmgtrtrust3) Top mgt are fair, honest, sincere and unbiased</td>
<td>.261</td>
<td>.771</td>
<td>.089</td>
<td>.141</td>
</tr>
<tr>
<td>(Topmgtrtrust1) Top mgt fulfil promises</td>
<td>.164</td>
<td>.713</td>
<td>.248</td>
<td>.126</td>
</tr>
<tr>
<td>(Com3) Clear how objectives of improvement are put into practice</td>
<td>.236</td>
<td>.632</td>
<td>.245</td>
<td>.321</td>
</tr>
<tr>
<td>(Com1) Two-way communication between top mgt and subordinates</td>
<td>.203</td>
<td>.581</td>
<td>.232</td>
<td>.274</td>
</tr>
<tr>
<td>(Com4) Good communication between mgt team and staff members concerning plans for improvement</td>
<td>.236</td>
<td>.565</td>
<td>.238</td>
<td>.336</td>
</tr>
<tr>
<td>(Topmgtsup5) Top mgt provide sufficient attention to the personal staff consequences</td>
<td>.377</td>
<td>.417</td>
<td>.199</td>
<td>.351</td>
</tr>
<tr>
<td>(Topmgtrtrustinpeers3) Top mgt appreciate and recognise my contribution to the improvement</td>
<td>.225</td>
<td>.258</td>
<td>.787</td>
<td>.146</td>
</tr>
<tr>
<td>(Topmgtrtrustinpeers2) Top mgt trust my competency, judgement and decision-making when implementing the improvement</td>
<td>.320</td>
<td>.204</td>
<td>.784</td>
<td>.200</td>
</tr>
<tr>
<td>(Topmgtrtrustinpeers1) Top mgt trust me to do the job well</td>
<td>.305</td>
<td>.193</td>
<td>.773</td>
<td>.212</td>
</tr>
<tr>
<td>(Selfvalence1) The improvements will increase my feelings of accomplishment</td>
<td>.391</td>
<td>.147</td>
<td>.626</td>
<td>.203</td>
</tr>
<tr>
<td>(Trustinpeers5) When something goes wrong, we look at the way we work rather than blaming others</td>
<td>.349</td>
<td>.245</td>
<td>.543</td>
<td>.182</td>
</tr>
<tr>
<td>(Trustinpeers4) Working with my peers is excellent and trustworthy</td>
<td>.410</td>
<td>.290</td>
<td>.463</td>
<td>.216</td>
</tr>
<tr>
<td>(Clearexpdir1) My top and senior mgt inform me of their expectations and provide direction</td>
<td>.399</td>
<td>.363</td>
<td>.405</td>
<td>.250</td>
</tr>
<tr>
<td>(part5) It is possible to talk about outdated regulations and ways of working</td>
<td>.290</td>
<td>.158</td>
<td>.173</td>
<td>.762</td>
</tr>
<tr>
<td>(Part4) Work problems and ideas are openly discussed</td>
<td>.215</td>
<td>.197</td>
<td>.287</td>
<td>.737</td>
</tr>
<tr>
<td>(Part3) Frontlines and operational staff can raise issues</td>
<td>.243</td>
<td>.308</td>
<td>.241</td>
<td>.642</td>
</tr>
</tbody>
</table>
Extraction method: Principal Component Analysis.
Rotation method: Varimax with Kaiser Normalization.
a. Rotation converged in six iterations.

One item, item 8 (‘Information concerning the improvement does not reach us’), was removed prior to conducting the final principal component analysis. This item consistently returned no clear loading on any factor and, on review of the wording, may perhaps have been interpreted as a negative reflection, as the respondents tended to respond more positively to positive wording. The PCA conducted for four factors without this item showed the most statistically and more acceptable results with cleaner loadings on each factor. It was therefore decided to continue the analysis using the four factors. The following are the factors that emerged with clean loadings on each factor from the PCA.

6.6.6 Emerging climatic factors with clean loadings
Four emerging climatic factors with clean loadings were renamed as efficacy, organisational trust in top management, organisational trust, top management support and participation.

6.6.6.1 Items in Climatic Factor 1 (subscales) – Efficacy (10 items)
Efficacy is measured by the subscales of self-efficacy, group efficacy and job knowledge:
1. Self-efficacy 1 – When implementing improvement, I feel I can handle it with ease.
2. Self-efficacy 2 – I have the skills to make the improvement work.
3. Self-efficacy 3 – I do not anticipate any problems adjusting to the work.
4. Self-efficacy 4 – When I set my mind to it, I can learn anything.
5. Self-efficacy 5 – My past experience makes me confident.
6. Group efficacy 1 – When implementing improvement, we feel our group can handle it.
7. Group efficacy 2 – We as a group have the skills that are needed to make this improvement work.
8. Group efficacy 3 – We as a group anticipate problems adjusting to the work we will have when this improvement is adopted.
9. Group efficacy 5 – Our past experience make us confident that we will be able to perform successfully after this improvement is made.

10. Job knowledge 2 – Information that relates to the scope of work is readily available and accessible.

This factor (scale) is renamed Efficacy. It portrays the employee’s perception as an individual and team member of a workgroup of their capability and confidence to execute the designated task, in this case the job task. It also relates to acquiring the knowledge and capability through knowledge transfer, either through the availability of tacit or explicit knowledge. Acquiring knowledge and capability enhances their self or group confidence in their ability to conduct their task. As a result, employees’ readiness is enhanced in supporting improvements positively and effectively.

The Cronbach’s alpha result for the above factor is 0.92, which is greater than the 0.8 considered acceptable and found to be highly reliable (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990)). Thus, these items were retained to be used in further analysis. This factor is referred to as Efficacy in subsequent analysis, as it refers to the employees’ confidence or efficacy as an individual or group member in conducting their job task.

6.6.6.2 Items in Climatic Factor 2 (subscales) – Organisational Trust in Top Management (7 items)

Organisational trust in top management is measured by subscales of trust in top management, communication and top management support:

1. Trust in top management 1 – Top management fulfils its promises.
2. Trust in top management 2 – Top management consistently implements its policies in the department.
3. Trust in top management 3 – I trust my top management to be fair, honest, sincere and unbiased in their decision-making and actions.
4. Communication 1 – The two-way communication between the top manager and the subordinates is very good.
5. Communication 3 – It is clear how the objectives of the improvement can be put into practice.

6. Communication 4 – There is good communication between management team and staff members concerning the organisation’s policy or plans for improvement.

7. Top management support 5 – Top and senior management provide sufficient attention to the personal consequences that the improvement could have for their staff members.

This factor (scale) is renamed Organisational Trust in Top management. This factor refers to the level of employees’ trust in terms of their confidence in and judgement of their top management’s capability and reliability, particularly when top management is able to demonstrate their support, reliability and ethics as a leader. To be able to portray honesty, fairness, unbiasness, sincerity, caring or concern for their subordinates earns employees’ trust and influences their readiness to support and act on improvements. The feeling of employee trust in the top management is also enhanced through good communication and transparency, thus avoiding unclear and misleading information and direction.

The Cronbach’s alpha result for the above factor is 0.872, which is greater than 0.8 (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990) and is considered acceptable and found to be highly reliable; thus, these items were retained to be used in further analysis. This factor is referred to as Organisational Trust in Top Management, as it refers to the trust that employees have in their top management’s capability and reliability. It also refers to the level of good communication that exists in the organisation, which enhances their understanding and sharing of the meaningfulness of the improvements.

**6.6.6.3 Items in Climatic Factor 3 (subscales) – Organisational Trust (7 items)**

Organisational trust is measured by the subscales of top management trust in subordinates, self-valence, trust in peers, clear expectations and direction from top and senior managers:

1. Top management trust in subordinates 1 – My top manager trust me to do the job well.
2. Top management trust in subordinates 2 – My top manager trust my competency, judgement and decision-making when implementing the improvement.

3. Top management trust in subordinates 3 – The top and senior management appreciates and recognises my contribution to the improvement.

4. Self-valence 1 – The improvements will increase my feelings of accomplishment.

5. Trust in peers 4 – Working with my peers/colleagues is excellent and trustworthy.

6. Trust in peers 5 – When something goes wrong, we look at the way we do our work rather than blaming others.

7. Clear expectations and direction from top and senior managers 1 – My top and senior management informs me of their expectations and clearly provides direction when necessary in implementing an improvement.

This factor (scale) is renamed Organisational Trust. This refers to the level of trust and teamwork that exists hierarchically in the organisation, cascading between top-down, bottom-up and sideways levels of management. The ability of top managers to demonstrate their trust and support in their employees’ capability and judgement enhances the employees’ confidence and readiness in terms of their reliability. Organisational trust also refers to the level of employees’ self-valence when they feel that the improvements have increased their sense of accomplishment. With the support of top management acting as mentors, the existence of trust among peers promotes a healthy environment of continuous creativity and innovativeness through learning without fear of being blamed by others if they make a mistake in their judgement or actions. Organisational trust also refers to the way top and senior management is transparent about their expectations and provide clear direction to their subordinates.

The Cronbach’s alpha result for the above factor is 0.897, which is greater than 0.8 (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990)) and is considered acceptable and found to be highly reliable; thus, these items were retained to be used in further analysis. This factor is referred to as Organisational Trust and will be used in subsequent analysis.
6.6.6.4 Items in Climatic Factor 4 (subscales) – Top Management Support and Participation (4 items)

Top management support and participation is measured by the subscales of top management support and participation:

1. Participation 3 – Frontline staff and operational staff can raise issues for discussion.
2. Participation 4 – Work problems and ideas are openly discussed.
3. Participation 5 – It is possible to talk about outdated regulations and ways of working.
4. Top management support 1 – The management supports the improvement process unconditionally (legislative and system support, technical, personal and administrative support and financially).

This climatic factor (scale) is renamed Top Management Support and Participation. This factor relates to the level of top management’s commitment in giving their support in every way. The factor also relates to top management’s ability to enhance employees’ involvement through open discussion and information sharing, thus enhancing their sense of belonging and ownership in the improvement process. This level of commitment that top managers are able to deliver will help to create and build employees’ readiness to support and act on improvement.

The Cronbach’s alpha result for the above factor is 0.834, which is greater than 0.8 (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990)) and is considered acceptable and found to be highly reliable; thus, these items were retained to be used in further analysis. This factor is referred to as Top Management Support and Participation and will be used in subsequent analysis.

From the above, the four influential factors that emerged are named Efficacy, Organisational Trust in Top Management, Organisational Trust and Top Management Support and Participation.
6.6.6.5 **Items in Readiness Factor 1 (subscales) – Multidimensional Readiness (8 items)**

Multidimensional readiness is measured by the subscales of cognitive, affective and intentional readiness:

1. Readiness (cognitive) 1 – Most improvements that are supposed to solve problems around here will make an impact.
2. Readiness (cognitive) 2 – Overall, the proposed improvements are for the better.
3. Readiness (affective) 1 – I find the improvement refreshing.
4. Readiness (affective) 2 – I have a good feeling about the improvement.
5. Readiness (affective) 3 – I experience the improvement as a positive process.
6. Readiness (intentional) 1 – I am willing to make a significant contribution to the improvement.
7. Readiness (intentional) 2 – I want to devote myself to the process of improvement.
8. Readiness (intentional) 3 – I am willing to put energy into the process of improvement.

The Cronbach’s alpha result for the readiness factor is 0.930, which is greater than 0.8 (an alpha coefficient of 0.8 or greater is considered reliable (Bryman & Cramer, 1990)) and is considered acceptable and found to be highly reliable. From the above, the influential climatic factors comprising four independent factors relate to Factor 1 (**Efficacy**) consisting of ten items, Factor 2 (**Organisational Trust in Top Management**) consisting of seven items, Factor 3 (**Organisational Trust**) consisting of seven items, Factor 4 (**Top Management Support and Participation**) consisting of four items. On the other hand, the Readiness Factor (**Cognitive, Affective and Intentional**) as the dependent variable consists of eight items.

The essential climatic factors remains as four independent factors relating to communication (six items), participation (five items), top management’s trust in subordinates (three items) and clear task roles and responsibilities (three items). (refer to Appendix 8)
6.7 RELIABILITY RESULTS

Internal reliability

Cronbach’s alpha for the independent and dependent influential climatic factors was found to be 0.805, thus acceptable and reliable. Cronbach’s alpha for the essential factors was found to be 0.95, thus acceptable and reliable. Bryman and Cramer (1990), cited in Cohen et al. (2007), suggest that the reliability level is acceptable at 0.8, although they also suggest that 0.67 and above is acceptable. Those factors that are found to be reliable will be used for further measurement (Cronbach’s alpha for each of the itemised factors can be seen in Appendix 8).

6.8 VALIDITY RESULTS

Using Pearson’s product moment correlation, all four influential and essential itemised climatic factors correlate significantly and positively with readiness factor on a multidimensional level at the 0.01 level (two-tailed) (see Appendix 8), thus, confirming the hypothesis that climatic factors influence positive employee readiness on a multidimensional level to support improvement.

6.9 LINEAR REGRESSION ANALYSIS RESULT

A linear regression analysis was conducted to explain the impact of the emerging independent influential factors on the dependent factor of readiness. The result shows that Factor 3 – organisational trust portrays the highest explanation of the difference (beta = 80%) among the influential climatic factors in employee readiness to support improvement (refer to figure 6.2).

The results show that Factor 3 – Organisational Trust was the first explanatory influential climatic factor (beta = 0.815, sig. = < 0.01), followed by Factor 1 – Efficacy (beta = 0.778, sig. = < 0.01). This is followed by Factor 4 – Top Management Support and Participation (beta = 0.647, sig. = < 0.01) and Factor 2 – Organisational Trust in Top Management (beta = 0.619, sig. = < 0.01). The coefficient of determination for Factor 3 (adjusted R2) was 0.664 (F = 1309.055, p<0.01), indicating that Factor 3 explains over 80% of the differences in the Readiness Factor. The coefficient of determination for Factor 1 (adjusted R2) was
0.605 (F = 1018.215, p<0.01), indicating that Factor 1 explains over 77% of the differences in the Readiness Factor. The coefficient determination of Factor 4 (adjusted R²) was 0.417 (F = 476.423, p<0.01), indicating that Factor 4 explains over 65% of the differences in the Readiness Factor. The coefficient determination of Factor 2 (adjusted R²) was 0.382 (F = 41.925, p<0.01), indicating that Factor 2 explains over 60% of the differences in the Readiness Factor.

Figure 6.2 Interrelation of climatic factors and employee readiness within the organisation.
6.10 CHAPTER SUMMARY

This chapter has presented the qualitative results of the Phase 2 study. Four itemised essential climatic factors were identified namely communication, participation, clear task roles and responsibilities and top management’s trust in subordinates. Eleven itemised influential climatic factors were further factorised into four major itemised factors that were renamed as: efficacy, organisational trust in top management, organisational trust, top management support and participation. Efficacy comprised of subscales relating to self-efficacy, group efficacy and job knowledge. Organisational trust in top management comprised of subscales relating to trust in top management, communication and top management support. Organisational trust comprised of subscales relating to top management’s trust in subordinates, self-valence, trust in peers and clear expectation and direction from the top and senior managers. Top management support and participation comprised of subscales relating to top management support and participation. Both essential and influential climatic factors affect employees’ readiness in a multidimensional level. The itemised readiness factor comprised of subscales relating to the cognitive, affective and intentional aspect of readiness. Using Cronbach’s alpha for reliability test and Pearson’s product moment correlation for validity test, all essential and influential itemised factors with multidimensional readiness itemised factor were found to be reliable and valid. Positive and significant correlation at the 0.01 level (two-tailed) using Pearson’s product moment correlation confirm the hypothesis that both the essential and influential climatic factors influence positive employee readiness on a multidimensional level to support improvement. Further linear regression analysis indicated that organisational trust portrayed the highest explanation of the difference (beta= 80%) among the influential climatic factors in employee readiness to support improvement. The measurements in terms of subscales for the above itemised climatic factors were based on employees’ agreement. Further discussion on the integration of Phase 1, Phase 2 result with the findings from literature review are further described and concluded in the following chapter.
CHAPTER 7 – DISCUSSION OF FINDINGS

7.0 CHAPTER OVERVIEW

Chapter 7 integrates the important findings and conclusion drawn from the study. Table 20.0 provides an overview of the research process and relates the findings with the aim and objectives of the study. This chapter reviews the results, provides a brief summary of the overall research findings and identifies the research contribution to readiness theory and organisational management. This chapter also presents the limitations of the research and makes further recommendations for further research, followed by the final conclusions drawn from the research. Figure 7.0 presents the general structure of this chapter, for which the following topics are discussed: (1) the new direction for public service organisations and its challenges (referring to Chapters 1 and 2); (2) current development in readiness theory, research gaps, research question and hypothesis (referring to Chapters 2 and 3); (3) the desired climate that promotes employees’ readiness to support improvements (referring to Chapters 2, 5 and 6); (4) Research question, hypothesis and conceptual framework (referring to Chapter 7); (5) evaluation of the methodology used (referring to Chapter 7); (6) discussion of the limitations of the study, the challenges and the recommendation for further research (referring to Chapter 7); (7) an overview of the major contribution and implications of this research and the learning points (referring to Chapter 7); and (8) a summary of the discussion (referring to Chapter 7).

7.1 CHAPTER INTRODUCTION

Further research in understanding the complexity of employee readiness for effective improvements in absolute monarch-governed organisations reports the outcome of the case study findings in Brunei Darussalam. The discussion relates the findings with the objectives and aim of study. The chapter structure is outlined in Figure 7.0.
The second part of this chapter (section 7.2), we highlight the new direction for public service organisations to adapt and survive complex problems. By identifying the current issues, the findings respond to the first part of **Objective 1: To identify the current issue and review the literature on the readiness concept, its climate and the characteristics of public service organisations.** The new direction highlights the movement away from
traditional ways of management towards new ways of management, also known as new public management. The need to promote positive employee readiness to support improvement as an essential step towards national development growth and the lack of research under absolute monarch-governed organisations inspired this study.

The third part of this chapter (section 7.3) highlights the contribution of findings to the current developments in the concept of readiness. The findings respond to the second part of **Objective 1: To review the current issue and review the literature on the readiness concept, its climate and the characteristics of public service organisations.** Complexity theory supported by qualitative findings is used to explain how employee readiness can be stimulated and developed in a complex and adaptive organisation. The discussion corresponds to **Objective 3: To explore the workings of complexity theory in explaining how employee readiness can be stimulated to support improvements in public service organisations.**

The fourth part (section 7.4) of this chapter answers the research question by identifying the essential and influential climatic factors that affects employees’ readiness to support improvements. Major findings of the empirical studies, both qualitative and quantitative support and confirm the hypothesis. The finding responds to the second and partly fourth objective of the study, namely **Objective 2: To investigate and identify the desired essential and influential climatic factors that promote employees’ readiness to support improvements in Brunei’s public service organisations.** The essential and influential climatic factors form the key elements of the favourable climate needed to stimulate employee readiness for effective improvements.

The fifth part of this chapter (section 7.5) responds to **Objective 4: To use the results, test the hypothesis, answer the research question and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.** An outcome of a finalised readiness conceptual framework and the working model from the results of study
demonstrates how employee readiness can be promoted in a complex and adaptive organisation.

The sixth part of this chapter (section 7.6) evaluates the methodology used. This section refers to critical, also known as pragmatic, research, which is a combination of both subjective and objective views. The use of a mixed method, i.e. qualitative and quantitative methods, and the appropriateness of this methodology in answering the research question is further explained.

The seventh part of this chapter (section 7.7) involves a critical review of the study conducted based on its limitations and challenges. For further development in this area of research, recommendations are further made for which the results will still be relevant to practitioners and organisational management.

In the final part of this chapter (sections 7.8 and 7.9), the research contribution and the practical implications from this research are highlighted and summarised. The results are specific to the Brunei context and other similar organisational contexts. Table 18.0 provides an overview of the research process and relates the findings to the aim and objectives of the study.

Table 18.0 Research process

<table>
<thead>
<tr>
<th>RESEARCH QUESTION</th>
<th>OBJECTIVES</th>
<th>AIM</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Subsidiary) What do we understand about promoting employees’ readiness to support improvements in public service organisations?</td>
<td>1. To identify the issue and review the literature on the readiness concept, its climate and the characteristics of public service organisations. <strong>Findings:</strong> Research gaps, research question, hypothesis and conceptual framework are established. (Chapters 1,2,3) (Chapter 7, section 7.2 to section 7.5)</td>
<td>To identify the essential and influential climatic factors that promote employee readiness for effective public service improvements in Brunei Darussalam</td>
<td>A readiness conceptual climate framework and model for promoting employee readiness for effective improvements in complex and adaptive organisations</td>
</tr>
<tr>
<td><strong>(Main)</strong> What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations?</td>
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<tr>
<td>2. To investigate and identify the desired essential and influential climatic factors that promote employees’ readiness to support improvements in Brunei’s public service organisations. <strong>Findings:</strong> Essential and influential climatic factors are identified. (Chapters 5,6,7) (section 7.4)</td>
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<td></td>
<td></td>
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<tr>
<td><strong>(Subsidiary)</strong> How is employees’ readiness effectively stimulated to support any nature of public service improvements in complex and adaptive organisations in Brunei’s context?</td>
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<tr>
<td>3. To explore the workings of complexity theory in explaining how employee readiness can be stimulated to support improvements in public service organisations. <strong>Findings:</strong> 1) Unintended conducive climate for effective improvements emerges out of employees’ readiness to adapt and survive. However, climate is not obvious but needs to be recognised from the employees’ perspective. 2) Essential climatic factors identified as initial triggers for minimum employee readiness. Initial level of employee readiness manifests into higher levels of readiness influenced by influential climatic factors. 3) Instability occurs in planned and unplanned improvement, requiring a continuous level of employee readiness to survive the constant flux of uncertainty. 4) Managers may consider the full identified range of climatic factors to sustain employee readiness for organisational excellence. <strong>Findings:</strong> Essential climatic factors identified as communication, participation, clear task roles and responsibilities and top management’s trust in subordinates. Influential climatic factors identified as efficacy, trust in top management, organisational trust, top management support and participation. Top management’s trust in subordinates is highly perceived as essential and influential in Brunei’s context.</td>
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</table>
How can employee readiness be promoted for effective improvements in public service organisations in Brunei’s context?

4. To use the results, test the hypothesis, answer the research question and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.

**Findings:** The development of a conceptual framework and working model confirming the hypothesis and answering the research question. (Chapter 7, section 7.5)

### 7.2 NEW DIRECTION FOR PUBLIC SERVICE ORGANISATIONS

The following discussion relates partly to the first objective of research study:

**Objective 1: To identify the current issue and review the literature on the readiness concept, its climate and the characteristics of public service organisations**

On an international level, the means of adapting to new ways of thinking becomes increasingly important as the challenges faced by public service organisations become more complex (World Public Sector Report, 2008; Bourgon, 2010, 2011; Global Agenda Council on the Future of Government, 2011). To cope with the demands of modernisation, public service organisations are continually improvising and readapting their strategies and tactics of management in order to adapt and survive ongoing challenges (Boyne, 2003; Bourgon, 2008; Bryson, 2011; Sang et al., 2012). In the search for ways to make public service more efficient and productive, new public management approaches seem to be the emerging pandemic of public sector reform (Diefenbach, 2009; Pollitt & Bouckaert, 2011). However, the adoption of modernisation is dependent on the context supported by evidence from previous studies and the 2005 OECD report ‘Modernising Government – The Way Forward’ (Demmke et al., 2008; Ohemeng, 2010; Politt & Bouckaert, 2011). Governments are searching for more flexibility and means of adapting to new ways of thinking to achieve efficiency and a high level of service delivery (Bellamy & Palumbo, 2010; Castells, 2010). Such complex challenges are influenced by political, economic,
social and environmental unpredictability and coping with technology advancement (discussed in Chapter 2). Governments’ responses to the path of modernisation included partnerships with the private sector, with some adopting semi-privatisation, privatisation and the decentralisation of management. Others include the use of advanced information and communication technologies for e-government, administrative, technology and system improvements (Bourgon, 2011). Yet with the implementation of improvement programmes, 70% to 80% of improvements have failed due to the issue of attitude (Beer & Nohria, 2000; Balogun & Hailey, 2004).

In Brunei’s context, public service organisations highlight similar pathways to modernisation with the adoption of the strategies to meet the Civil Service vision of the 21st century and the National Vision 2035 (further described in Chapter 4, section 4.9.4 to section 4.9.7). However, the qualitative findings highlight the issue of employee attitude contributing to improvement ineffectiveness and failure (see Figure 5.9 in Chapter 5, section 5.5.4.5). The path towards a new direction of corporate culture guided by the Civil Service vision of the 21st century and the National Vision 2035 means to inculcate a positive readiness culture that is reflected in the organisation’s business plan under learning and growth. Examples are the Prime Minister’s Office, the Brunei Civil Service and the Ministry of Development’s business plans (discussed in Chapter 4, section 4.9). However, establishing realistic benchmarks as the means of measuring the right conducive climate is still unclear (refer to Chapter 5, section 5.5.3). The issue of employees’ attitude remains to be understood in public service organisations and is continuously being mentioned by the highest authority.

7.2.1 The complexity of challenges: serving beyond the predictable

The term ‘emergence’ describes the role of government organisations in coping with unpredictability. According to complexity theory, emergence refers to the process by which a new state emerges from the interaction of complex systems simultaneously as they self-organise (Kauffman, 1995; Morrison, 2002; Richardson, 2005). The qualitative results from this study found that the feeling of excitement and urgency that chaos creates increases the level of receptivity of top management to creativity and innovativeness from
lower level employees. This unintended climate supported by other influential factors drives the emergence of a new state of performance level through employees’ readiness as they self-organise to survive (refer to Chapter 5, section 5.5.4.6). The emergence of a new state can be explained by the simple rules of initial conditions (Waldrop, 1992; Morrison, 2002) or by way of Boids, discussed in Chapter 2 (Reynolds, 1987). The initial conditions, in this study, refer to the essential climatic factors (refer to Chapter 5 section 5.5.4.2) that evolve which are able to trigger a minimum level of employee readiness.

Applied to public service organisations, complexity theory considers government organisations as complex and adaptive. Complex refers to the functioning of public services in a diverse network of multiple interconnected governmental organisations. Adaptive refers to the capability of organisations to learn and adapt in order to survive the complexity of the challenges. The results of the interaction and interdependence of the organisation’s subsystems and its environment is the emergence of a dynamic open system able to adapt, evolve and readapt to survive (Morrison, 2002; Morgan et al., 2008). The qualitative results of this study have shown that a minimum level of employee readiness can be achieved. Self-organising activities during chaos creates the emergence of an open climate triggered by the essential climatic factors of communication, participation, clear task roles and responsibility and top management’s trust in subordinates. These climatic factors form the key elements needed for creativity and innovativeness through information, knowledge, trust and experience sharing to adapt to the complexities (refer to Chapter 5, sections 5.5.4.2 and 5.6.8).

The challenge for governments is to think beyond the predictable measures towards non-linear thinking if organisations are to survive. To achieve the platform of non-linear thinking emphasises the need for an adaptive organisation and adaptive workforce, thus requiring a conducive climate. In other words, employees need to be READY to support improvements and survive the constant flux of unpredictability, as emphasised by the interview respondents (refer to Chapter 5, section 5.6.4).
7.2.2 The importance of employees’ readiness to support improvements

Employees’ readiness has been found to be important for improvement or change success (Armenakis et al., 1993; Armenakis & Harris, 2002; Luecke, 2003; Jones et al., 2005; Bouckenooghe, 2008). The importance of understanding the complexity of readiness for effective improvements calls for more attention in readiness research (Balogun & Hailey, 2004; Cinite et al., 2009; Fariza et al., 2012). The qualitative results of this study support the importance of employee readiness for improvements to succeed (refer to Chapter 5, section 5.5.3). All of the 119 interviewed respondents agreed with the usefulness of a readiness climate assessment tool on the condition that its outcome is effectively managed for the benefit of employees (refer to Chapter 5, section 5.4.1.10). Findings from this study have shown that the determinants of employee readiness are specific and can be incrementally stimulated (refer to Chapter 5, section 5.6.7 and section 5.6.8 and Chapter 6, section 6.6.6). For improvements to succeed in government organisations has been known to be difficult, resulting in failure due to the general criticism of being too complex, bureaucratic, centralised and incompetent (Asawimalkit, 2008; Cinite et al., 2009). Conversely, some researchers (Anderson, 1991; Talib, 2002; Thambipillai, 2011) provide evidence of monarch-governed organisations in the Middle East and South East Asia surviving the demands of modernisation yet maintaining the country’s identity. The reasons may originate from the stability within the organisation, thus investigating Brunei’s context may provide extended knowledge in understanding the complexity of employee readiness in a complex and adaptive organisation.

7.3 CONTRIBUTION OF FINDINGS TO CURRENT DEVELOPMENTS IN THE CONCEPT OF READINESS

The study refers to the discussion in Chapters 2 and 3 and positions the perspective of the studied context in filling the research gaps in the literature. The discussion relates partly to the first objective of the study:

**Objective 1: To identify the current issues and review the literature on the readiness concept, its climate and the characteristics of public service organisations**
Employee readiness has been found to be important for improvement or change success (Armenakis et al., 1993; Armenakis & Harris, 2002; Luecke, 2003; Jones et al., 2005; Bouckenooghe, 2008). As yet there is no one universal definition and measurement of readiness, thus a readiness concept brings us closer to understanding its complexity. Results from this study shows that employees under Brunei’s context percept differently as to what measure their readiness to support improvements. Some of the climatic factors argued as important and potentially influential in the literature is lowerly percept under Brunei’s context (refer to Chapter 5, section 5.6.11). Reasons are further explained in section 7.3.1. Existing readiness measurement tools and management approaches are dominantly developed from Western nations with less reference to monarch-governed organisations in non-Western countries. Readiness measurement contents may vary when taken out of the westernised cultural context and extends our understanding of the readiness concept. Findings from this study have shown that readiness measurement contents do vary emphasising the need for further research of readiness in complex and adaptive organisations under different studied context. The findings support some researchers argument on the dependency of readiness determinants on political and organisational context which are perceived and theorised differently in different contexts (Pettigrew et al., 2001; Fatima, 2002; Shah & Iran, 2010). Research in readiness under Brunei’s context is underpresented if not non-existent.

7.3.1 Lower impact climatic factors
The study found some climatic factors that are perceived to have less priority for employee readiness compared to the literature findings. Examples of these factors are job demand (Miller et al., 2006; Cunningham et al., 2002), job satisfaction (Probst, 2003), conduciveness to unlearn (Anderson & Boocock, 2002; Becker, 2003), management’s opportunity to lead continuous improvement (Weick, 2003; Burnes, 2004), perceived organisational support, flexibility in policies and procedures and logistic and system support (Eby et al., 2000; Rafferty & Simons, 2006) and internal customer focus and team processes (Dalu & Deshmukh, 2002; Dana, 2004). The results of the interviews with the participants may explain the different perception in the Brunei context compared to previous findings in the literature (further explained in Chapter 5, section 5.6.11). Firstly,
the participants express their cognitive and affective readiness to support improvement activities out of their sense of responsibility to the monarch, spiritual values and a selfless mindset. Hence, the workload of job demand, the job satisfaction factor, perceived organisational support and internal customer focus and team processes have less impact on their readiness as long as the employees feel that improvements will bring benefits and a sense of achievement to themselves, the organisation and the nation. However, the dependency of employee readiness on other essential and influential climatic factors as have been identified are crucial for adaptation to improvement complexity (refer to Chapter 6, section 6.6.6 and Chapter 7, section 7.4). Furthermore, the portrayal of the leadership of His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam in relation to improvement initiatives to achieve the National Vision through his ‘titahs’, or royal speeches, visits to public service organisations enhances employees’ readiness to support improvements. Particularly in adapting to the instability of improvements, unintended dominant climatic factors have been identified that are needed for employees’ readiness to support improvements.

Secondly, flexibility in policies and procedures, internal customer focus and team processes and management’s opportunity to lead continuous improvement are also perceived to have less impact on employee readiness (refer to Chapter 5, sections 5.6.11.3, 5.6.11.6 and 5.6.11.8). Employees have learnt to be receptive and able to work around the constraints in order for improvements to succeed as long as they have their top management’s support and trust in them. Relying on their self and group confidence, employees have learnt to be creative and to provide flexibility around the constraints to overcome complex problems. The rigid constraints in such a complex and adaptive environment stimulate the emergence of individual and team creativity to adapt quickly to the complexities and survive.

Thirdly, the perceived unimportance of logistic and system support and conduciveness to unlearn may be explained by the unreliability of the existing logistic and system support and high dependency on the private sector for its maintenance. Thus, the trust of employees that the system is ready may influence their perception on its importance as a
climatic factor. It is speculated that during chaos, the excitement, the sense of responsibility and the urgency results in less time to unlearn or learn new ways. It is a matter of acting immediately in order to survive, and the process itself envelopes the learning and unlearning process within the employees’ environment.

The factors that have less impact on employee readiness suggest that monarch-governed organisations may hold the conduciveness to strengthen employees’ preparedness to adapt to complex challenges. However, based on the employees’ perception, the factors are only obvious during periods of instability. There is a clear indication that the organisation is evolving through a process of learning new ways of management and may need a conducive climate to expedite its improvement plans effectively. With the demonstration of strong leadership at every level, the support and trust allows for flexibility and adaptation to the unpredictability of improvements. The result is the emergence of a conducive climate that is able to trigger and influence employees’ readiness to support successful improvements.

7.3.2 Readiness as multidimensional and multilevel

Recent developments in the theory of readiness have concluded that the readiness concept covers a multifaceted, multilevel and multidimensional perspective (Pideret, 2000; Seligman & Csikszentmihalyi, 2000; Oreg, 2006; Bouckenooghe, 2008; Weiner, 2009). The study argues that the multidimensional and multilevel perspective of readiness needs to be aligned for effective improvements. However, research on the alignment of climatic factors with the multifaceted aspect of employee readiness is limited and underdeveloped. The qualitative results of this study provide evidence that improvement management has an impact on the way employees believe, feel and act in supporting improvements effectively (refer to Chapter 5, section 5.6.10). The study of the sample of multilevel employees have found significant positive correlations between desired climatic factors and employee readiness on a multidimensional level, namely affective, cognitive and intentional (refer to Chapter 6, section 6.8). However, the influence of these climatic factors on each of the three dimensions of readiness may differ with each factor. The cognitive aspect of employee readiness in relation to the improvement is measured by
employees’ belief that most improvement that is supposed to solve problems will make an impact and that improvements are for the better. Thus, believing in the need and capability of the improvement to solve their problems influences employees’ readiness. This study shows that the cognitive side of top management in the improvement is crucial to employees (refer to Chapter 5, section 5.6.10.1). The affective dimension of employee readiness is measured by the positive feelings that employees have about the improvement, the anticipation that the improvement is a positive experience and that the improvement is refreshing, unlike previous experience of unsuccessful improvements (Chapter 5, section 5.6.10.2). The intentional dimension of employee readiness, as agreed by employees, is measured by the commitment and effort that employees are willing to contribute to ensure the success of the improvement. This study emphasise that in a closely networked, socially connected organisational context, it is important that the promotion of improvement plans and activities focus on the positive benefits and effectiveness and are aligned to the multidimensional side of employee readiness (Chapter 5, section 5.6.10).

Another factor that may affect employee readiness in a multidimensional way is the governing ideology of the ‘Malay Islamic Monarchy’ embraced in the administrative system and working culture. Qualitative analysis revealed that employees’ multidimensional perspective is strongly influenced by their obedience to the principles of their religion and the monarchy. The governing ideology of the Malay Islamic Monarchy in the administrative system is in accordance with His Majesty the Sultan and Yang Di Pertuan of Brunei Darussalam’s proclamation during Brunei’s Independence in 1984, as partly stated in the ’titah’:

‘Brunei shall be forever a sovereign, democratic and independent Malay, Muslim Monarchy upon the teachings of Islam according to Ahlis Sunnah Waljemaah and based upon the principle of liberty, trust and justice and ever seeking … the peace and security, welfare and happiness of our people…’ (Brunei Resources, 2005)

The governing concept of the Malay Islamic Monarchy is reflected in employees’ beliefs, feelings and intentions to act out of responsibility, loyalty and obligation to God and the
monarchy. The belief and feeling of trust in all directions is an important factor in
employee readiness. Trusting top management to be honest, fair and that they genuinely
believe in the improvements and the organisation as a team relates to the Islamic
principles. Any uncertainties or unpredictabilities are placed on their faith and trust in
God’s will, thus explaining employees’ patience and adaptive resilience to ensure
improvements succeed (refer to Chapter 5, section 5.6.10).

Employee readiness is perceived differently at multiple levels, suggesting the need for
alignment and to identify common ground (refer to Chapter 5, section 5.6.9). It is
speculated that the high connectedness of unity between individuals, teams, subunits and
sections within the organisation as well as other organisations affecting each other
indicates a high level of influence between them. Thus, individual readiness may influence
team readiness and, consequently, employee readiness among other teams across subunits
and sections. The overall level of employee readiness is reflected in the organisational
readiness, allowing the organisation to evolve towards better performance in service
delivery. The study emphasises that the management team need to focus on multilevel
employees, starting with individuals, when planning and implementing improvements.

The influential factors of organisational trust in top management and top management
support and participation relate to issues external to the individual such as the level of
organisational support and the level of communication and participation that exists within
the organisation. To a certain degree, some of the factors relate specifically to the
individual and group level involved during the implementation process. Examples are the
employees’ perception and feeling of trust towards their top managers in terms of their
capability, reliability and ethical conduct in their decision-making and actions. The degree
of fairness, unbiasness, sincerity and honesty in a leader, particularly during decision-
making and action, contributes to their credentials as a good leader. It also affects the
employees’ perception and trust of the intention of the improvement initiative.

Some of the factors relating externally to the individual and group level may, to a certain
extent, be influenced by wider organisational approaches. The influential factor of efficacy
and organisational trust relate more closely to the individual and group, although some relate to organisational factors. The sub-factors of the factors of efficacy and organisational trust are related to the outlook, perspective, judgement, feeling and experience of the employee as an individual and team member of a task group undergoing improvements. These sub-factors are self-efficacy, group efficacy, job knowledge and skills, top management’s trust in subordinates and self-valence. Therefore, both factors of efficacy and organisational trust are considered to be related to the individual and group rather than the organisation. The combination of individual, group and organisational sub-factors within each factor shows that many organisational actions, whether as part of the improvement context or process, have a direct impact upon the level to which an individual and group believes and feels ready to act and support, both prior to and during, improvement implementation. These factors have an impact on the emotional, cognitive and intentional level of employee readiness. Similarly, the essential factors of communication, participation, top management’s trust in subordinates and clear task roles and responsibilities relate to the individual and group level. The manifestation of employees’ readiness at multiple levels contributes to the organisational readiness in succeeding improvements.

If employees’ readiness can be achieved at multilevels, the impact may lead to an overall positive organisational culture and readiness, thus developing into an adaptive organisation. The study suggests that management should focus on facilitating a conducive climate that satisfies the multilevel and multidimensional aspect of employee readiness. However, the desired climate needs to be recognised in order to facilitate this as part of the management strategy.

7.3.3 The nature of improvement

Improvement content refers to the type or nature of the improvement implemented. The types of improvement can be distinguished as traditional planned, episodic, discontinuous and intermittent, and the new emergent improvement pattern as continuous, emergent, unplanned, evolving and incremental (Weick & Quinn, 1999; Bamford & Forester, 2003). It is argued in this study that complex and adaptive organisations such as public service
organisations experience both planned and unplanned improvement simultaneously. Thus, identifying common climatic factors under a synergy of planned and unplanned improvement may result in sustaining employees’ readiness to survive any complex challenges. Recent findings are also limited to a single dimension and type of improvement, predominantly planned, thus leading to specific conclusions (Bouckenooghe, 2008; Gagnon et al., 2011). The results of the study indicate that public service organisations do experience a frequent synergy of both natures of improvement, where planned improvement always turns out to be unplanned due to unpredictable triggers (refer to Chapter 5, section 5.6.5). This finding supports previous researchers’ arguments that the emergence of employee readiness is in constant flux and a combination of both natures of improvement (Dawson, 1996; Eby et al., 2000; Madsen et al., 2006; Rafferty & Simons, 2006).

To survive and adapt requires a conducive climate for continuous employee readiness at multiple levels. Due to the urgency and excitement that chaos creates, multilevel employees and managers tend to self-organise and more readily create an unintended conducive climate (refer to climatic factors in Chapter 5, Figures 5.5a, 5.5b, 5.6a and 5.6b). The conducive climate, which may not exist in normal circumstances, promotes employees’ readiness further to survive the challenges. It is important that a synergy of both planned and unplanned improvement is considered for the framework to get close to reality. It also serves to fill a void in the research, as the majority of readiness research deals with planned improvement (discussed in Chapter 3, section 3.1.2).

It has been argued that radical change can become continuous through the dynamic interaction of amplifiers, contextual conditions and small changes (Plowman et al., 2007). Similarly, can minimum readiness be triggered as an initial condition and amplified through influential factors to result in continuous readiness? The findings of this study have identified the essential climatic factors as an initial condition for triggering a minimum level of employee readiness. Employee readiness is amplified to a higher level by identified influential climatic factors, leading to effective and sustained improvements (refer to Chapter 5, section 5.6.7 and section 5.6.8 and chapter 7, section 7.4).
7.3.4 Public service organisations as complex and adaptive

Monarch-governed public service organisations in Brunei are considered to be complex and adaptive, however are underpresented in readiness research. An example is the Public Works Department that functions under the umbrella of the Ministry of Development, comprising several departments such as Road, Water Services, Drainage and Sewerage and other service organisations. The public service organisations’ existence and their interrelated and interconnected functions as a whole to adapt to the challenges and achieve the National Vision indicate their complexity and adaptability capabilities (refer to Chapter 4, section 4.9). In relation to the findings, complexity and chaos theory has been used to fulfil the third objective:

Objective 3: To explore the workings of complexity theory in explaining how employees’ readiness can be stimulated to support improvements in public service organisations.

Complexity theory, originating from the work of the Santa Fe Institute in the 1970s and 1980s, is a theory of survival, evolution, development and adaptation. Complexity theory has been used to explain the workings of complex adaptive systems such as public service organisations (Waldrop, 1992; Lewin, 1993; Kauffman, 1995). In responding to complex challenges, the ability to respond adaptively requires an adaptive organisation and adaptive people with the right mindset (Bentley & Wilsdon, 2003). Chaos and complexity theory explains that dynamic systems are a product of the initial conditions governed by simple rules for improvement. These simple rules give rise to emergent complexity through interaction simultaneously (Morrison, 2002). The findings of this study support the above argument in that minimum employee readiness to support improvement is achieved through the dynamic interaction and interrelation of essential climatic factors. These are communication, participation, clear task roles and responsibility and top management’s trust in subordinates. The combination of these essential climatic factors enhances the sense-making of the situation, knowing what to do and being given the trust and having the confidence to carry out the task in a creative and learning environment (refer to Chapter 5, section 5.5.4.2). The respondents relate these essential climatic factors to past
improvement success, thus supporting Chapman’s (2003) argument on the importance of identifying the conducive climate that promotes employee readiness in this adaptive state.

In this study, essential climate factors represent the simple rules for minimum readiness that can be triggered and, consequently, stimulate a higher level of employee readiness as awareness of and the ‘know-how’ of improvement are understood at multiple levels. The ‘know-how’ knowledge in the form of tacit and explicit knowledge that is shared across the organisation stimulates minimum readiness through the four essential factors. Through the amplification of this interactive and interrelated mechanism of essential climatic factors across the organisation, a higher level of readiness is influenced and enhanced by the influential climatic factors.

Influential climatic factors reflect a strong supportive system and the development of organisational learning among organisational members. These influential climatic factors are identified to be efficacy, organisational trust in top management, organisational trust, top management support and participation (refer to Chapter 5, section 5.6.7 and Chapter 6, section 6.6.6). The process itself supports previous findings (Peak & Frame, 1994; Kauffman, 1995; Morrison, 2002; Richardson, 2005). The qualitative results indicate that the conducive climate that triggers and influences employee readiness forms an unintended climate that emerges out of the need to survive. Employee readiness is also driven by the excitement and urgency of chaos (refer to Chapter 5, sections 5.6.7 and 5.6.8). Hence, the study suggests that conduciveness lies in the employees’ perspective. Leadership also plays an important role in promoting emergence and self-organising in a complex and adaptive organisation such as public service organisations.

The outcome of this study demonstrates the importance of understanding the interrelating linkage between employee readiness, the conducive climate and the complexity of the organisational characteristics as being complex and adaptive. The linkage helps management recognise the inner strength of their organisation and develop appropriate approaches without investing in drastic measures or change. The outcome of this study suggests that leadership should concern itself in fostering, nurturing and enabling the right conduciveness for self-organising to take place. The application of complexity theory in public service management, particularly in the absolute monarch context, has helped to fill
in the voids of the underdeveloped readiness research in a complex and adaptive organisation. The knowledge from this study provides means of promoting and facilitating the management of improvements in a less persuasive manner. However, complexity theory only helps to explain the process of how order emerges from lower forms of behaviour, initiated by essential climatic factors. The results from an emergent inquiry to identify the emergence of a conducive climate that can trigger and further influence employees’ readiness to support improvements has brought us closer to better manage employees’ behaviour improvements to succeed.

7.4 Answering the Research Question and Testing the Hypothesis

Taking account of the research gaps identified from the literature and responding to the issues of public service improvements, the study aims to answer the following research question and test the following hypothesis:

Main Research Question: What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations?

And

Hypothesis: The identified climatic factors have a positive relationship with employees’ multidimensional readiness for effective public service improvements.

Answering the research question corresponds to the second objective of study.

Objective 2: To investigate and identify the desired essential and influential climatic factors that promote employees’ readiness to support improvements in Brunei’s public service organisations.
A preliminary study involving 119 interview and survey respondents across three public service organisations in Brunei resulted in a range of desired climatic factors (refer to Chapter 5). Both essential and influential climatic factors were identified (refer to Chapter 5, sections 5.6.7 and 5.6.8). The dominant climatic factors filtered out of a synergy of both planned and unplanned improvement were developed further into itemised statements measuring each climatic factor. These measurement items were finalised in the final stage based on the feedback of 665 survey respondents across four public service organisations (refer to Chapter 6, section 6.6). The results of the analysis identified four essential climatic factors, namely communication, participation, clear task roles and responsibility and top management’s trust in subordinates. The influential climatic factors were identified to be efficacy, organisational trust, organisational trust in top management, top management support and participation (refer to Chapter 6, section 6.6.6). The significant positive correlation between these identified climatic factors and the multidimensional nature of employee readiness confirms the hypothesis that there is a positive relationship between the desired climatic factors and employee readiness (see Appendix 8). Linear regression analysis shows that organisational trust represents the highest explanation of the difference (beta = 80%) among the influential climatic factors in influencing employees’ readiness to support improvements (refer to Chapter 6, section 6.9). The analysis results also show that the climatic factors affect the readiness of an employee in a multidimensional manner, thus supporting previous research (Bouckenooghe, 2008; Holt et al., 2009).

The identified influential and essential climatic factors were found to be valid and reliable (refer to Chapter 6, sections 6.7 and 6.8). The outcome of the study partly supports and partly differs from previous research findings in the literature (refer to Chapter 5, section 5.6.11 and Chapter 7, section 7.3.1). Top management’s trust in subordinates was an additional factor that emerged from the study (refer to Chapter 5, section 5.6.12). The study suggests that there is a unique conduciveness in absolute monarch-governed organisations that allows for some flexibility to adapt. However, these climatic factors are not obvious and need to be recognised and stimulated and can be potentially used as a diagnosis tool to facilitate employee readiness for effective improvements.
The result of the study show that employee readiness can be promoted in an incremental manner: (1) by identifying the existing state of readiness (readiness at level zero) – extreme cases may result in no readiness or employees’ resistance to the implementation of improvement; (2) by identifying the initial state of minimum readiness where essential factors can trigger employees’ readiness (readiness at level 1) (refer to Chapter 5, section 5.6.8); (3) by identifying a higher state of readiness where influential factors can influence employee readiness (readiness at level 2) (refer to Chapter 5, sections 5.6.7 and 6.6.6); (4) by identifying the state of continuous readiness where the full range of potential climatic factors can be considered to sustain improvement (readiness at level 3) (refer to Chapter 5, sections 5.6.7 and 5.6.8). The following sections explain the condition at each level of readiness under a synergy of both planned and unplanned improvement.

7.4.1 Existing state of readiness (readiness at level zero)

The research findings identified the current state of employee readiness; 95% of the participants felt obedient and ready to support improvements, expressing their awareness of their responsibility and obligation to the monarch and religion (refer to Chapter 5, section 5.4.1.10). Employees also expressed the feeling of urgency that influences their behaviour to act. However, reliance on the existing state of readiness is not sufficient to fully support and implement improvements effectively due to their lack of confidence and belief that improvements will succeed. The required essential factors were expressed by the participants as being crucial to trigger a minimum level of readiness to support any improvement.

7.4.2 Minimum state of readiness (readiness at level 1): essential climatic factors

The results of this study have identified communication, participation, clear task roles and responsibility and top management’s trust in subordinates in the improvement context and process as crucial to trigger a minimum level of employee readiness (refer to Chapter 5, section 5.6.8). The level of communication, as perceived by the respondents, is measured by how frequently multilevel employees are informed about the progress of improvements
and how clear the objectives of the improvement can be put into practice. It is also measured by how good the communication level is between the management team and staff members concerning the organisation’s policy or plans for improvement. Keeping employees well informed of the improvement progress increases the sense of belonging and makes the improvement more meaningful for employees (refer to Chapter 5, section 5.5.4.2). It also minimises any influence of negative thoughts led by misunderstandings or miscommunication cascading through the network interaction of multilevel employees. The main key point that triggers minimum employee readiness is being aware of improvement plans and progress, knowing how employees fit into the improvement plans and what their role and expectations are. Thus, it is important for employees to understand and be continuously informed about and involved in the improvement plans and activities well ahead of and during implementation. The preparedness of employees to cope with complexity when implementing improvements is the key element to ensure their readiness to support successful improvements.

The level of participation, as perceived by respondents, is expressed by how readily frontline staff and operational staff can raise issues for discussion, work and ideas are openly discussed and if it is possible to talk about outdated regulations and ways of working. It is very clear that the three statements that define the level of participation as desired by employees reflects new management methods and leadership skills (refer to Chapter 5, section 5.5.4.2). This study suggests that the emergent, self-organising organisations such as public service organisations, which are complex and adaptive, have to concern themselves with organisational learning in order to adapt. Leadership plays an important role in facilitating the conducive climate for self-organising and organisational learning to take place, allowing organisations to evolve. Facilitating organisational learning implies changes to working practices and the level of transparency if flexibility for emergence and self-organisation is to flourish. The desired level of participation describes the characteristic of organisational learning where there is teamwork and cooperation between units, sections and departments, an open channel where participants can think in new ways and communicate collaboratively, ideas are encouraged from all employees.
regardless of their level and risk-taking is supported in a blame-free culture (Goh, 1998; Marsick, 2000).

The factor of top management’s trust in subordinates that emerged from the qualitative study is strongly expressed by the level of top management’s trust in their subordinates to do the job well, top management trusting their subordinates’ competency, judgement and decision-making when implementing the improvement and the level of top management’s appreciation and recognition of subordinates’ contribution to the improvement. Top management’s trust in subordinates is crucial in enhancing subordinates’ belief and confidence to be adaptable for effective improvements. The feeling of being trusted provides mental support and enhances employees’ confidence and belief that they are ready. The study suggests that the right leadership qualities are important and can nurture employee readiness for a learning organisation. Providing trust in subordinates through a dynamic mechanism of communication, participation and having clear roles and responsibility allows employees to gain confidence to be creative in order to adapt.

It is possible to speculate as to why the four factors are prominently felt essential (see Appendix 4 for participants’ quotations). Firstly, absolute monarch-governed organisations reflect a closely connected unity within subunits, sections, the organisation and other organisations working towards one goal, the National Vision. In such an environment, social interactivity within the network structure places communication, participation, clarity and trust at its core to survive complexity and for improvements to be understood and supported at multiple levels (refer to Chapter 5, section 5.5.4.2). The factors of communication, participation, clear roles and responsibility and trust are central constructs of complexity theory (Morrison, 2002). At the time of study, reshuffling activities of top and middle managers placed a high reliance of new leaders on their subordinates while maintaining final decision-making responsibility. A strong feeling of top management’s trust in subordinates creates the emergence of conduciveness that triggers employee readiness in a cognitive, affective and intentional way. The emphasis on the factor of top management’s trust in subordinates in the literature is lacking compared to the high reliance of employee readiness on trust in top management and their peers. This result
indicates that further research is needed to explore the factor of top management’s trust in subordinates in other closely networked hierarchical organisations.

7.4.3 Higher state of readiness (readiness at level 2): influential climatic factors

With the amplification of essential climatic factors, previous levels of resistance are minimised as the awareness and genuine purpose of improvements are understood at multiple employee levels. The climate has changed from being passive to one that is reactive due to the excitement and urgency to survive and adapt (refer to Chapter 5, section 5.6.4). Due to the dynamic interaction and interrelation of these essential factors across the hierarchical network of multilevel employees, i.e. across units, sections and departments, minimum readiness is influenced to reach higher levels of readiness. The sense of belonging and being involved in the improvement process is further enhanced by the influential climatic factors. The emergence of influential climatic factors is a result of the new direction that pushes the organisation away from the previous equilibrium state, influencing a higher level of employee readiness (refer to Chapter 5, section 5.6.6).

This study identified four major influential factors, namely efficacy; organisational trust in top management; organisational trust and top management support and participation (refer to Chapter 6, section 6.6.6). Efficacy, as perceived by the respondents, is measured by self and group efficacy and job knowledge. Self and group efficacy refers to the confidence that builds up from employees’ skills, experience and the mindset to learn new things as individuals and in teams. Efficacy also depends on the efficiency and accuracy of the information that is readily available and accessible in relation to job knowledge. The findings highlight that information and experience act as a flow of knowledge that is shared among employees, which is necessary for employee readiness (refer to Chapter 6, section 6.6.6.1).

Organisational trust in top management is measured by sub-item statements relating to trust in top management, communication and top management support. Trust in top management refers to how well the employees trust their top management to fulfil their
promises implement policies and be able to demonstrate a good level of fairness, honesty, unbiasness and sincerity in relation to the improvements. Two-way communication is vital in relaying awareness among employees of what, how and why improvements are being made. The ability to demonstrate top management support in terms of providing sufficient attention and response to the impact of improvement on the employees’ working routine enhances employees’ trust in top management (refer to Chapter 6, section 6.6.6.2).

Organisational trust, as agreed by respondents, is measured by top management’s trust in subordinates, self-valence, trust in peers and clear expectations and direction from top management. Top management’s trust in subordinates refers to the way top management trust their peers to do their job well by trusting their competency, judgement and decision-making when implementing the improvements. It also refers to the way top management appreciates and recognises employees’ contribution to the improvement. Self-valence refers to the way improvement’s success increases employees’ feeling of accomplishment (refer to Chapter 6, section 6.6.6.3). In this study, respondents see themselves as part of the organisation and their level of commitment goes beyond their self-benefit, involving faith reasons and contributing to the nation (refer to Chapter 5, section 5.6.10). It is speculated that Brunei’s small population of less than 400,000 people under absolute monarch regime may reflect a very close network of social unity, thus explaining employees’ strong sense of responsibility and obligation to their monarch and religion. Thus, employees’ readiness is influenced when they feel the accomplishment of improvement success. Brunei’s small population under absolute Islamic Monarch governance and the country’s reliance on oil and gas revenues can be compared to similar scale of Islamic Middle East countries like Qatar and Bahrain. Other monarch neighbouring countries that may be facing similar challenges in the public sector may include Thailand, Malaysia and Cambodia. The significance and application from the findings of this study may project further understanding on the complexity of readiness within a closely networked absolute monarch hierarchical governed organisational regime. However, further works to incorporate this study under different organisational setting and case studies such as the private sectors, educational institutions and health sectors may widen its applicability and generalise the findings.
Trust in peers refers to an environment of learning where peers are not blamed when something goes wrong, but are encouraged to focus on where they went wrong and learn from their mistakes. The ability of top managers to guide employees through the improvement process by relaying clear explanations and direction about how improvements are to be implemented enhances organisational trust, thus influencing employee readiness (refer to Chapter 5, section 5.5.4.1). Top management support and participation as an influential factor refers to the way top management supports employees unconditionally. The support from top management, as required by employees, is in the form of financial, administrative, social and collaborative support, with other relevant agencies enabling employees to fully support improvements. It is important that employees see that top management believes in the improvements to be able to support them unconditionally, influencing employees’ readiness to support the improvement. An environment where the frontline and operational staff can raise issues and openly discuss ideas with top management creates the conducive communication and participation channel that promotes employees’ readiness to support improvements. The participation of employees that enables them to talk about outdated regulations and ways of working with top management enhances their readiness to support improvements. However, it is important that the continuous cycle of improvement plans, i.e. do, check and act, is maintained for effectiveness (refer to Chapter 6, section 6.6.6.4).

It is suggested that public service organisations represent a closely connected, networked organisation characterising a complex and adaptive system (refer to Chapter 5, section 5.6.6). To survive complex challenges and unpredictability requires an adaptive organisation and workforce. To achieve an adaptive workforce with the right level of readiness requires a healthy environment of organisational learning, knowledge management and leadership skills. These form the key elements that allow flexibility, creativity and emergence to flourish. It is important to create distributed knowledge and all channels of communication and participation must be shared, leading to a complete flow of information. However, it is speculated that there may be a risk of information overload and leaks to confidentially, in which case top managers, units, sections and departments may have to filter out irrelevant information.
7.4.4 Continuous state of readiness (readiness at level 3): sustaining climatic factors

Based on the employees’ perspective, the findings are in agreement with the 22 selected climatic factors extracted from the literature, with top management’s trust in subordinates as an additional factor that affects employee readiness to a certain degree. The factors under the improvement context are history, trust in top management, conduciveness to unlearn, job satisfaction, the manager/employee relationship, employees’ job demand, common understanding of quality and customer requirements, self-efficacy and personal valence, group efficacy, job knowledge and skills, trust in peers, clear task roles and responsibilities and clear expectations and direction from top management (Chapter 2). Under the improvement process, the factors are communication, participation and top management support, logistic and system support, flexibility in policies and procedures, perceived organisational support, management’s opportunity to lead continuous improvement, internal customer processes and team processes and management’s trust in subordinates (Chapter 2). The results show that each factor is perceived to influence positive employee readiness to a certain extent, but some are of less significance. These climatic factors form the ideal range that covers the full range from the respondents’ perspective and are potentially able to sustain continuous readiness as part of a long-term strategy. However, only eleven dominant climatic factors is considered sufficiently potential. The findings of dominant climatic factors as percept by participants are generalised among the three departments as shown in Figure 7.1.
7.5 THE FINAL CONCEPTUAL FRAMEWORK AND MODEL

The outcome of a readiness conceptual framework and working model from this study extends current development in readiness research in terms of its comprehensiveness. Few recent studies have taken a comprehensive and combined pragmatic approach, highlighting the varying outcomes (Rafferty & Simons, 2006; Essain et al., 2010). Recent findings are also limited to a single dimension and type of improvement, predominantly planned, thus leading to specific conclusions (Bouckenooghe, 2008; Gagnon et al., 2011). The final conceptual framework is a result of study that goes beyond a single combined effect. It views the characteristics of organisations as complex and adaptive and considers a wider range of climatic factors that affects the multidimensional aspect of readiness. Consensus from multilevel perspective of employees fulfils a holistic approach. There is no research in this field for the case of Brunei Darussalam (refer to Chapter 2, section 2.6 and Chapter 7, section 7.3). The outcome of a conceptual framework and model serves the purpose of the fourth objective of study.
Objective 4: To use the results and test the hypothesis and develop a readiness climate conceptual framework and working model that promotes employees’ readiness to support improvements in Brunei’s public service organisations.

The challenge for public service improvement strategy is to move beyond the prescribed mechanistic management approaches and integrate a tailored readiness approach for improvement to be supported and succeed. The final conceptual framework and working model is shown in Figure 7.2 and 7.3.
Figure 7.2 Finalised conceptual framework.
Figure 7.3 Working model showing the development of employee readiness.
7.6 EVALUATION OF METHODOLOGY

This study adopted a critical, also known as pragmatic, research methodology where both subjective and objective views are required to uncover a deeper understanding of the complexity of readiness from the employees’ perspective. Triangulations of non-empirical evidence with a combination of a deductive approach supported by an inductive approach were adopted to further validate the results. The qualitative results from the interviews highlights the emergence of an unintended climate driven by employees’ readiness to survive complex problems (refer to Chapter 5, sections 5.6.7 and 5.6.8). However, this unintended climate is not obvious but needs to be recognised from the employees’ perspective and experience in coping with unpredictability. It is for this reason that both qualitative and quantitative studies were considered to pursue further insights based on the employees’ perception of what works well within their working and social network environment (refer to Chapter 5, sections 5.5 and 5.6). The challenge is to understand the complexity of employee readiness and facilitate the emergence of conduciveness that is able to promote employee readiness in complex and adaptive organisations. Complexity theory is applied as an additional way of relating to employee readiness in complex and adaptive organisations (refer to Chapter 4). The information will provide managers with a means of facilitating the right conduciveness in a non-persuasive manner and presents a challenge to management research.

The main research question stems from a synergy of both planned and unplanned improvement, considering the workings of complexity theory as employees self-organise to survive and adapt to unpredictability and uncertainty. The study focuses on identifying the essential and influential climatic factors that evolve as a result of the self-organising process, sufficient to trigger and influence employees’ readiness to support improvements. From a preliminary inquiry involving both qualitative and quantitative methods, both the desired essential and influential climatic factors were identified based on participants’ experience of planned and unplanned improvement (refer to Chapter 5, sections 5.6.7 and 5.6.8). Frequencies and comparative analysis from both methods were analysed to filter out common dominant climatic factors that promote employee readiness in any nature of improvement. The final stage of the study involving a survey method identified the
measurement statement items of climatic factors based on the participants’ agreement (refer to Chapter 5, 5.6.14). This research focuses more on the antecedents and consequences of organisational improvement at one reference point in time rather than on the stages of improvement over time as the improvement process unfolds.

Referring to the research title *What triggers and influences employees’ readiness for effective improvements in public service organisations?*, the study combines several objectives of the inquiry to uncover the effects of the organisational improvement climate on employee readiness. The contribution of this study can be considered as a critical approach to improvement. The organisational improvement climate in this study considers the improvement content, process and context factors and views organisational characteristics as complex and adaptive. Considering the focus of this study (i.e. a synergy of planned and unplanned improvement) is grounded in both the objective and subjective views of knowledge claims, it is fair to conclude that the study’s choice for both a qualitative and quantitative approach (survey and interview) is the most appropriate choice in this study (refer to Chapter 4, section 4.6).

7.7 RESEARCH LIMITATIONS, CHALLENGES AND RECOMMENDATIONS

There is still considerable scope for further work that could cover the limitations of this research. Further research in understanding the complexity of readiness for improvement will remain highly relevant, as research in this area signifies the human role in managing improvements effectively. Suggestions are as follows.

7.7.1 Limitations of the methodology used

Ideally, a longitudinal approach to the study over different stages of the improvement process would be most appropriate (Ven de Ven & Huber, 1990; Pettigrew, 1990) and would have ensured the internal validity of the outcome. However, due to the constraints of the PhD project period, a cross-sectional study was conducted in which the data was gathered by means of a survey questionnaire and interviews. To increase the internal validity, as an alternative, case studies of several organisations with similar operating roles and functioning backgrounds facing similar challenges and nature of improvements were
conducted. The comparative findings across the selected organisations further generalise the results. For this purpose, three organisations in the Public Works Department were selected for the preliminary study and four organisations for the final study. Across the selected organisations, this study inquired about the participants’ experience and overall perspective of previous effective improvements over a certain time period. Since all the organisations involved are in the Public Works Department, improvement initiatives are similar in nature. All organisations function in an integrative and parallel manner with each other to achieve similar goals. Examples of similar and parallel improvement initiatives include reshuffling top and middle management, technology upgrades and procedural and work process improvements through ISO certification. Analysing and identifying the climatic factors that promote employee readiness at different stages of the improvement process in a longitudinal study would help refine the research further. The purpose is to see if the range of factors varies at different stages. The findings would also provide further understanding of the complexity of readiness. Further work towards the development of a tailored diagnostic management tool would contribute valuable information in ensuring effective improvements.

### 7.7.2 The development of a diagnostic tool

The findings of this study clearly show different climatic factors to the range found in several existing readiness measurement tools, indicating the need for tailored approaches that suit different organisational contexts. The study is limited within the time constraints of a PhD project, with the climatic factors identified within the developed readiness framework sourced from four organisations in the Public Works Department. Further testing in other public service or private sector organisations may be needed to see if the range of climatic factors differs. Further development of the research findings into a readiness assessment tool which is tested for its validity and reliability and put into practice in Brunei Darussalam is needed. Conducting this research in different government sectors, education institutions and private organisations would reveal effectiveness and general applicability of the developed framework. However, the scope and time required to realise the level of research needed goes beyond the scope of a PhD research project and the benefits of the research can only be seen over the long term.
7.7.3 The validity of the climatic factors in other organisational contexts

The range of readiness climatic factors within the developed framework is specifically suited to Brunei’s conditions, which may be applicable in other countries with similar conditions. More studies to extend the range of climatic factors would further refine the framework’s applicability under different organisational contexts such as other government organisations, the private sector and educational entities.

7.8 MAJOR CONTRIBUTIONS, IMPLICATIONS AND LEARNING POINTS

This study sheds new light onto ways in which employee readiness can be promoted within a complex and adaptive organisation such as public service organisations. This study involves four major contributions to the organisational management and readiness literature. Firstly, the study brings us away from researching the organisational readiness concept on a single or dual perspective towards more complex conceptualisation at multiple and multidimensional levels. The results of this study extend the conceptual understanding of readiness in a comprehensive dimension, using a wider range of variables, and the combined perspectives of improvement content relates to multilevel and multidimensional readiness. Complexity theory is used to explain how employee readiness can be stimulated incrementally in complex and adaptable organisations.

Secondly, the study looks at what triggering and influential climatic factors for any nature of improvement affect employee readiness in a positive manner. Complexity theory helps to explain the importance of facilitating the emergence of conduciveness for employees’ readiness to cope with complex problems. Thirdly, taking case studies involving Brunei’s absolute monarch-governed public service organisations allows further insight into the conduciveness of a complex organisational context. Fourthly, the study highlights the strong factor of trust, in particular top management’s trust in subordinates, for employee readiness, where the working culture reflects a unity of connectedness within the hierarchical network organisational structure. Fifthly, the outcome of the study is a proposed conceptual readiness climate and model that demonstrates the interrelationship between improvement climate (improvement context, process and content), organisational characteristics as complex and adaptive and employees’ multidimensional readiness.
Figure 19.0 shows a summary of the significant contribution and the prepositions made in relation to the research gaps in readiness theory.

Table 19.0 Summary of the significant contributions and prepositions.

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Contribution to theory of readiness</th>
<th>Explained by complexity theory</th>
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</thead>
<tbody>
<tr>
<td>1. Importance of a tailored readiness approach to a synergy of both planned and unplanned improvement. Employee readiness is a multifaceted, multilevel and multidimensional construct. Thus, it is important to facilitate the right climatic factors that align to the multidimensional and multilevel aspect of employee readiness.</td>
<td>A conceptual framework and model is derived from a complex conceptualisation at multiple and multidimensional levels. It demonstrates how employee readiness can be stimulated and facilitated for effective improvements within a complex organisation.</td>
<td>There is no universal theory that can account for phenomena, in this case employee readiness in complex and adaptive systems. Specific theory is dependent on organisational context (Morrison, 2002). Emergent organisations are transformative and operate at several levels: individual, groups, organisation. Developing the learning environment emphasises communication and connectedness at multilevels (Hickman, 2000; Morrison, 2002).</td>
</tr>
<tr>
<td>2. Employee readiness can be incrementally stimulated in complex and adaptive organisations by facilitating essential and influential climatic factors.</td>
<td>Essential and influential climatic factors are identified that promotes employee readiness to support improvements. Hypothesis confirms the significant positive relationship between identified climatic factors and employee readiness on a multidimensional level. Essential climatic factors act as an initial condition for minimum readiness level. By enhancing on influential climatic factors, employees’ readiness can be amplified to sustain higher level of readiness.</td>
<td>Dynamic systems are a product of the initial condition governed by simple rules for improvement. These simple rules give rise to emergent complexity through interaction simultaneously (Waldrop, 1992; Peak &amp; Frame, 1994; Kauffman, 1995).</td>
</tr>
<tr>
<td>The determinants of employee readiness is dependent on the organisational context. It is important to recognise the emerging climate from employees’ perspective.</td>
<td>Absolute monarch governing context portray specific outcomes of climatic factors. Climatic factors are differently percept in absoulte monarch context, placing high reliance on the trust factor. Study also provides further insights into</td>
<td>For a complex and adaptive system, the organisation is most adaptive and creative, readiness more readily achieved at the edge of chaos. Important to identify conducive climate that promotes employee readiness at the edge of</td>
</tr>
</tbody>
</table>

243
the key elements for promoting employee readiness in complex and adaptive organisations.

chaos (Rossenhead, 1998).

4. Top management’s trust in subordinates is crucial to employee readiness in complex and adaptive organisations.

Importance of leadership role in trusting their subordinates towards adopting a learning and adaptive organisation.

Connectedness implies a mutual relationship between individuals and teams, between teams and between subsystems (Lewin & Regine, 2000).

Connectedness is required for a system to survive. Mutual trust and communication is vital (April et al., 2000; Morrison, 2002).

5. There is an important linkage between understanding the character of organisation as complex and adaptive, the multifaceted construct of employee readiness and a broader climatic context that need to be understood. By integrating the linkages, employee readiness can be stimulated and facilitated effectively towards an adaptive workforce.

Outcome of a readiness conceptual framework highlights the important linkages between the characteristic of complex and adaptive organisation, the improvement climate and the multidimensional aspect of employee readiness.

Complex adaptive systems relate more to the interrelating and interactive mechanism of people combining the agency and mutual influence of individuals and groups (Stacey, 2000; Morrison, 2002).

7.8.1 Practical contribution

In terms of the practical contribution, this study highlights the key areas in which government organisations should focus in facilitating their employees’ readiness to support successful improvements. Further work on the findings to develop a readiness diagnostic tool will assist improvement agents to strategise their management approaches for effective improvement. All of the employees agreed on the availability of a tailored readiness assessment tool but were sceptical about its effectiveness (refer to Chapter 5, section 5.5.4.4). Only when top management is able to view a readiness diagnosis tool as positive will it be effective in promoting employees’ readiness to support improvements. The study also helps to capture the employees’ perspective and provides a means of hearing the employees’ voice regarding what conditions may work well for effective improvements. The study provides a readiness climate framework of approach and a model which will
assist practitioners, human resource development and management, improvement agents and leaders to facilitate employee readiness for effective improvements.

7.8.2 Research implications

- This study has led to the development of a readiness climate conceptual framework and model that can be used as a ‘readiness strategic approach for effective improvements in public service organisations’. The framework consists of the climatic factors necessary to promote employees’ readiness to support improvements. The use of this framework could be as an awareness programme for managers and supervisors in public service organisations in Brunei. Further development of the results into a tailored diagnostic tool for public service organisations in Brunei would assist managers to follow the necessary strategic path towards effective improvements. Whilst this framework has been developed to suit Brunei’s context, its applicability could be useful in other organisations with a similar background.

- There have been many previous studies on readiness covering single or dual dimensions of the different components conceptualising the complexity of readiness, even in different organisational contexts (refer to Chapter 2). However, no prior studies have sought to explicitly extend the concept of readiness on a comprehensive level in an absolute monarch-governed organisational context. The comprehensiveness of this study, which considers a synergy of both planned and unplanned improvement over a wider range of climatic factors and multifaceted dimensions of readiness, results in specific climatic factors that can stimulate employee readiness, thus suggesting that strategic approaches need to be tailored. The implication of this study suggests that government organisations do not have to invest drastic effort or promote employee readiness in a commanding manner, only ending up in frustration. Instead, employee readiness can be stimulated at a minimum level by focussing on the simple rules of an essential climate. The essential climatic factors are communication, participation, clear task roles and
responsibility and top management’s trust in subordinates. The amplification of these essential climatic factors will further influence employee readiness by focussing on influential factors, namely efficacy, organisational trust in top management, organisational trust, top management support and participation. The unique result of this study opens up further understanding of the complexity of readiness, which encourages researchers to exploit the underdeveloped factor of top management’s trust in subordinates in the literature for similar governmental organisational contexts.

- The main aim of this study was to identify both the essential and influential climatic factors that could trigger and influence employee readiness incrementally for effective public service improvements. The aim of the study closely relates to the concerns of practitioners and managers, in particular in Brunei’s public service organisations. The common question that most improvement agents asked is ‘how do we promote employees’ readiness to support improvements in a non-commanding way?’ The framework this study offers answers to this question by identifying the desired climate to be facilitated when implementing improvements. The comprehensiveness of this study acts as real-world applied research in that the criteria of the research brings us closer to reality, thus providing added value to practitioners and frontline managers in terms of its applicability in the real world.

Further development of this conceptual framework into a diagnostic tool will be implemented in the near future as part of the researcher’s organisational strategy in Brunei Darussalam. In answering the call of His Majesty and Yang Di Pertuan of Brunei Darussalam in his recent speeches for the need to inculcate an adaptive new mindset through employee readiness, this study will act as a catalyst for future integration of the readiness approach in the strategic management of improvements in public service organisations.
7.8.3 Lessons learnt

The lessons learnt from the results of this study and the literature led us to conclude that creating a climate conducive for employee readiness provides strong support for successful improvement. However, the emerging climate is not obvious but needs to be recognised for tailored approaches. Referring to the framework (Chapter 7, section 7.5), the study has identified four essential climatic factors (i.e. communication, participation, clear task roles and responsibility and top management’s trust in subordinates) that trigger a minimum level of employees’ readiness to support improvement. As the dynamic mechanism of these four forces is amplified, a higher level of employee readiness can be influenced by four influential climatic factors. These factors are efficacy, organisational trust in top management, organisational trust, top management support and participation. Other factors that may sustain readiness in the long term include history, the conduciveness to unlearn, job satisfaction, the manager/employee relationship, employees’ job demand, logistic and system support, flexibility in policies and procedures, perceived organisational support, management’s opportunity to lead continuous improvement, internal customer focus and team processes, common understanding of quality and customer requirements and clear task roles and responsibilities.

7.9 SUMMARY OF DISCUSSION

In summarising the discussion, the key to effective improvement depends on the balance between mechanistic and systematic management approaches with human people relationship approaches. The different range of readiness climatic factors resulting from the study reflects supportive and different findings when compared to previous research findings under different organisational contexts (refer to section 7.4). If a readiness assessment tool were to be develop as part of management strategy, it would need to be tailored for effective improvements. This study affirms that there is no standard one best solution of management approach to promote readiness, but that the complexity of readiness in complex and adaptive organisational systems needs to be understood.

Brunei’s monarch-governed context adds value to the existing literature, as the findings identify the conduciveness behind common bureaucratic constraints that need to be recognised to promote readiness for effective improvements. This study provides simple
minimum rules that management needs to focus on to enhance employee readiness for effective improvements without investing drastic improvement or change efforts with unrealistic goals. The result of this study also reflects the importance of creating a learning environment where trust, confidence and support are crucial in order for the organisation to adapt. The study suggests that for an emergent, self-organising organisation, the role of leaders and top management in promoting organisational learning is vital if an organisation is to adapt. Readiness climate factors such as communication, participation, top management support, efficacy and trust reflect the necessary elements for learning in that top management’s trust in subordinates, communication, clear task roles and responsibility and participation are strongly perceived to trigger minimum employee readiness.

The framework of study demonstrates a holistic approach to understanding the interrelationships between the nature of improvement, public service organisations as complex and adaptive and the desired climate that promotes employee readiness on a multilevel and multidimensional level. The findings suggest several key issues:

1) Future research into employee readiness needs to consider a synergy of planned and unplanned improvement to get close to reality.
2) Employee readiness in complex and adaptive organisations can be stimulated and facilitated by recognising the essential and influential climatic factors based on the employees’ perspective.
3) Readiness determinants are dependent on organisational context, need to be recognised from within the organisation and management approaches need to be tailored for full benefit.
4) Creating chaos is necessary to identify the right conduciveness to promote employee readiness.
5) Public service organisations are complex and adaptive, thus need to be understood. The human relation aspect needs to be integrated with the systematic aspect of managing improvements for them to be effective.
Promoting employee readiness is neither quick nor simple. It requires a coherent and integrative strategy that supports the organisation’s main strategy. Stimulating employee readiness begins with the incremental approaches of *Triggering* employee readiness by promoting essential climatic factors and *Influencing* employee readiness by demonstrating management’s commitment, support and trust at every level towards a learning organisation. Communicating clear direction from top management and disseminating knowledge is also important in influencing employee readiness. Advancement of employee readiness that sustains continuous readiness can be achieved through the remaining climatic factors identified. Leadership commitment, support and trust are crucial in order to create a conducive environment that promotes employee readiness in a positive and adaptive manner.
CHAPTER 8 – CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

8.0 CONCLUSION

This chapter concludes the research by drawing conclusions based on the findings and discussions that relate to the objectives and aim of the study in answering the research question. In answering the research question ‘What are the essential and influential climatic factors that are needed to trigger and influence employees’ readiness to support improvements in Brunei’s public service organisations?’, the essential and influential climatic factors were identified. The essential climatic factors needed to trigger employee readiness are communication, participation, clear task roles and responsibilities and top management’s trust in subordinates. The influential climatic factors that influence employee readiness are efficacy, organisational trust in top management, organisational trust, top management support and participation. Statistical analysis confirms the hypothesis that there is a positive significant relationship between the identified climatic factors (both essential and influential) with employee readiness on a multidimensional level. The findings imply that recognising the organisational climatic factors from the employees’ perspective is the key to effective improvements in a complex and adaptive organisation. Furthermore, identifying the essential and influential climatic factors indicates that employee readiness can be stimulated and facilitated through a non-persuasive and incremental approach. However, the findings from the study are specific to Brunei’s context and further gaps were identified, leading to recommendations for further research. Results of study lead to the outcome of a conceptual and working model contributing to the development of readiness concept in absolute monarch governed organisational context.
8.1 SUMMARY OF RESEARCH FINDINGS

This research examined and identified the perceived conditions needed for employee readiness to support improvements in public service organisations. The findings of the study identified the required climatic factors in answering the research question `What are the essential and influential climatic factors that could trigger and influence employees’ readiness to support public service improvements?’ The study also confirmed the positive significant relationship between the identified climatic factors and employee readiness in the way employees believe, feel and act positively towards improvement. The study found that the essential and influential climatic factors allow employees’ readiness to manifest incrementally within a complex and adaptive organisation. On one hand, the study affirms that readiness is a multidimensional construct. The study found that a shared perspective from employees can be achieved from a multilevel perspective of employee readiness (as an individual, team member and as the organisation). Complexity theory is used to explain the incremental manner in which employees’ readiness can be developed. Essential climatic factors form the triggers of minimum level of employee readiness and the influential climatic factors are able to influence and sustain higher level of employee readiness. Through the incremental stages of employee readiness development, it allows organisations to cope and evolve with the demands of modernisation in a creative and learning environment.

In filling the voids in the research, the study combined two theories: the multifaceted theory of readiness and complexity theory. For readiness theory, the study covers the combined effects of a wider range of climatic factors on the multiple dimension of employee readiness, which is lacking in the existing research (Holt et al., 2007; Bouckenooghe & Devos, 2008; Weiner, 2009; Rafferty et al., 2013). Complexity theory, a theory about survival, evolution, development and adaptation (Allen & Strathern, 2003; Wallace et al., 2007), is used as an additional perspective to understand and explain the manifestation of employee readiness in a complex and adaptive organisation. The study integrates the theories to examine how employee readiness can be promoted in a complex and adaptive organisation. A synergy of both planned and unplanned improvement, which is under studied, is utilised to get close to reality. Brunei’s absolute monarch-governed
context in public service organisations presents the ideal case of complexity, as previous research in such a context is underrepresented if not non-existent.

Four departments of the Public Works Department that are involved in the delivery of services to the public in Brunei Darussalam were selected for the investigation. Specifically, the research aimed to firstly identify the dominant essential and influential climatic factors from the desired range as perceived by employees. Secondly, the research aimed for the participants’ agreement on the developed itemised measurement statements of each dominant climatic factor. A case study strategy was adopted across the selected departments, namely the Water Services Department, the Road Department, the Technical Services Department and the Drainage and Sewerage Department.

In order to answer the main research question of this study, the data gathered from the case studies were analysed to respond to the subsidiary questions and objectives that support the main question. The conclusions drawn from the research are highlighted below.

1) During chaos, an unintended conducive climate emerges from self-organising activities within the organisation as an adapt-to-improve strategy, promoting employees’ readiness to support improvements. However, the climatic factors are not obvious but need to be recognised from the employees’ perspective as drivers of improvement initiatives. To achieve an adaptive workforce that provides the right support towards improvement success, managers and improvement agents need to recognise the essential and influential climatic factors.

2) The identified essential climatic factors act as the initial conditions that have the potential to trigger a minimum level of employee readiness, enough to support improvements in the initial stage. These essential climatic factors were identified to be communication, participation, clear task roles and responsibilities and top management’s trust in subordinates. The essential climatic factors reflect the crucial elements of a learning environment where there is a continuous flow of knowledge and information for improvements to be understood and supported from multilevel employees. For a complex
and adaptive organisation in Brunei’s context, top management’s trust in subordinates is strongly perceived by employees to affect their readiness to support improvements.

3) The identified influential climatic factors further amplify the minimum level of employee readiness to a higher readiness level. The influential climatic factors were identified as efficacy, organisational trust in top management, organisational trust, top management support and participation. Further emphasis on trust, support and direction from leaders and managers promotes the distribution of leadership and mentorship towards enhancing employees’ readiness to support improvements in a creative, learning environment. The result is an adaptive workforce and organisation.

4) Based on the shared multilevel perception of employees, statistical and inductive analysis confirms the hypothesis that there is a positive significant relationship between the identified climatic factors and employees’ readiness on a multidimensional level, i.e. in the way they believe in, feel about and act towards improvement. Empirical studies also provide evidence on the reliability of the climatic factors. The conclusion is that employee readiness is a multidimensional and multilevel construct. Employee readiness can be developed incrementally in a non-persuasive manner by emphasising efforts on the identified climatic factors that align with the positive way employees believe in, feel about and act towards the improvement.

5) Public service organisations are complex and adaptive, thus need to be understood. The human relationship aspect needs to be integrated with the systematic aspect of managing improvements for effective improvements.

6) The outcome of a conceptual framework and working model firstly highlights the important linkages between understanding the characteristic of public service organisation as complex and adaptive with the components of organisational climate for improvement. By using a wider range of climatic factors under a synergy of both planned and unplanned improvement, the framework and working model demonstrates how the elements interrelate to affect employees’ readiness in a multidimensional level. The
comprehensiveness of this study that is understudied in current readiness research extend the theoretical explanation of successful improvements through employees’ readiness in a complex and adaptive organisation. Brunei’s case reflects a similar situation in public sector organisations facing complex problems. Brunei’s uniqueness as an absolute monarch-governed context means that there is flexibility and that improvement success can be achieved if the conducive climate is recognised by employees. However, the findings of this study are specific to the organisational context, thus tailored approaches would provide optimised benefits.

In conclusion, the key to effective improvement depends on the balance between the mechanistic and systematic management approaches with human relationship approaches. Management should move away from traditional methods and embrace a new mindset of management that promotes learning and leadership that allows flexibility, self-organisation and emergence to take place. If a readiness assessment tool were developed as part of management strategy, it would need to be tailored for effective improvements. This study affirms that there is no standard one best solution of management approach to promote readiness but that the complexity of readiness in complex and adaptive organisational systems needs to be understood. Promoting employee readiness is neither quick nor simple. However, employee readiness can be effectively managed and stimulated towards improvement effectiveness.

8.2 RECOMMENDATIONS FOR FURTHER RESEARCH
In view of the limitations of this study, several recommendations are made for future research.

8.2.1 Methodology of approach
This research involves a cross-sectional study with reference to events in planned and unplanned improvements at one point in time. Ideally, a longitudinal study approach over different stages of the improvement process would be most appropriate. It would be interesting to observe if the range of climatic factors varies over the different stages of the improvement process. The results would ensure the internal validity of the outcome.
Furthermore, the research was limited to government organisations in the Public Works Department with similar backgrounds and operating functions. For further applicability of the research findings and generalised results, it would have been better if different agencies with different organisational functions and backgrounds had been studied. These agencies can range from the private sector, education agencies, health agencies, administrative agencies and military agencies. Similar studies conducted in other countries involving organisations with similar backgrounds would extend the generalisation of the results on an international platform. In addition, the use of a wider range of climatic factors on a larger population sample, possibly including employees in sub-offices and other districts, would have incorporated other climatic factors that were not anticipated in earlier studies. Thus, it is recommended that future studies should include a longitudinal study approach over different stages of the improvement process and conducted in different organisational and political contexts, both on a national and international level. Thus, further studies using a wider range of climatic factors and a larger population sample are recommended.

8.2.2 The development of a diagnostic tool
The outcome of the study is limited to a conceptual framework and working model and requires more work on developing the information into a readiness climate diagnostic tool. Testing the diagnostic tool in several public service organisations and monitoring the organisational performance would increase its reliability, validity and applicability in different organisational contexts. Furthermore, the findings of this study clearly show specific climatic factors, indicating the need for tailored approaches that suit different organisational contexts. Conducting further studies in a wider range of organisational contexts would increase its applicability and generalise the findings.

8.2.3 Top management’s trust in subordinates
Top management’s trust in subordinates was found to be a strong triggering and influential factor for employees’ readiness to support improvements in absolute monarch-governed organisations. However, specific research on this factor is underdeveloped, as more information can be found in relation to trust in top management, mutual trust and trust in peers in the literature (Rafferty & Simons, 2006; Bouckenooghe, 2008). Thus, it is
recommended that future research is conducted in relation to the measurement statement items that define top management’s trust in subordinates in similar organisational contexts.
REFERENCES


APPENDIX 1 – Sample of Phase 1 survey questionnaire

SURVEY QUESTIONNAIRE (Round 1)

<table>
<thead>
<tr>
<th>Participant Information for PhD Research Project</th>
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<tbody>
<tr>
<td>Readiness for Public service improvements in Brunei Darussalam</td>
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<tr>
<td>Researcher Contact</td>
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<th>Nor Imtihan Hj Abd Razak</th>
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<tr>
<td>8774558</td>
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<tr>
<td><a href="mailto:norimtihan.razak@gmail.com">norimtihan.razak@gmail.com</a></td>
</tr>
</tbody>
</table>

Thank you for agreeing in this research looking into Employees Readiness for Public Service Improvement in Brunei Darussalam, which is being conducted as part of my PhD studies with Loughborough University. The field study will be selecting few Departments under Public Works, in Brunei.

AIM: The purpose of this study is to provide further understanding of the employees’ readiness (referring to a person and taskforce group level), who as part of the organisational improvement, are required to have positive attitude in supporting organisational improvement. Readiness for improvement means that employees are prepared mentally and physically for immediate action to support improvement. This is in line with Public Works motto `Bersedia Berkhidmat’ meaning ’Ready to serve’. This questionnaire asks your VIEWS on two issues:-

Part 1
a) From the list given, what do you (as a person or part of a taskforce group) think are the most INFLUENTIAL factors that are needed to influence your being ready to support planned and unplanned improvements? You can also ADD other additional factors that you think are equally influential.
Part II
b) List from all the factors, including your added factors, the most ESSENTIAL or CRITICAL factors (less or not more than ten factors), without which you cannot achieve Readiness to support improvement. The improvement applies to both Planned and Unplanned improvement.

Examples of Planned Improvement: Projects based initiatives, Upgrading of IT, New IT or technology system, Upgrading of existing operational system, changed in policy, improvisation from key performance monitoring,

Examples of Unplanned Improvement: Incremental improvement, improvement in procedures, operational activities, reshuffling, loss of staff due to being promoted elsewhere, major disruption, crisis that causes chaos and requires quick improvisation to adapt to normal condition.

The findings from this survey study will led to the development of the contents of a proposed readiness assessment tool for organisation to strategically manage their employee’s readiness to support improvement, tailored to Brunei’s context. The assessment tool will allow for the organisation to be assessed for readiness on three levels. Firstly, an indication of the CURRENT state of employees’ readiness, Secondly, the ESSENTIAL factors in need of strengthening (Transitional state) to trigger minimum employees’ readiness and thirdly, the INFLUENTIAL factors in need of strengthening to bring the employees’ readiness to Future state of continuous readiness to succeed and sustain improvement.

The assessment tool allows to demonstrate a strengthening management approach to foster the employees’ readiness within the organisation from the current state to the future state of continuous readiness to survive in planned and unplanned improvement.

Participation

Your participation in this study will involve completion of the questionnaire which is estimated to take 20 minutes. Completion of the question is voluntary and your decision of whether to participate or not will in no way impact upon your current or future relationship with the organisation. If you do not agree to participate, you can withdraw from participation at any time prior to completing the questionnaire. However, as the question is anonymous, it is not possible to withdraw once your questionnaire has been submitted.

Expected benefits

It is expected that this project will not benefit you personally but it is hoped that the results of this study will inform the management level who are responsible for implementing improvements.
There are no risks beyond normal day-to-day work associated with your participation in this study.

All comments and responses are anonymous and will be treated confidentially. The names of each participant are not required in any of the responses. Results will be reported within the PhD thesis and elements of it will be reported at conferences and in journals. In all of these situations, neither individuals nor organisations will be identified and the level of information provided about participants will not allow any identification.

The return of the completed questionnaire is accepted as an indication of your consent to participate in this study.

Please contact the researcher named above to have any question answered or if you require further information about the study.

The University has a policy relating to Research Misconduct and Whistle Blowing which is available online at http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm. If you do have any concerns or complaints about the ethical conduct of the study, you may contact the above website.

The return of the completed questionnaire is accepted as an indication of your consent to participate in this study.
SECTION 1. BACKGROUND INFORMATION

1. Gender
   - ☐ Male  ☐ Female

2. Have you been involved in a task force group?
   - ☐ Yes  ☐ No

3. Age range
   - ☐ 18-25 years  ☐ 26-45 years  ☐ 46 – 50 years  ☐ 50-60 years

4. Highest qualification
   - ☐ Masters and above  ☐ Degree  ☐ Diploma  ☐ Diploma below

5. Job clarification
   - ☐ Top Managers (determines the direction of the organisation or Department and directs its functioning through other managers)
   - ☐ Middle managers (performs specific tasks or manages a section or unit – Senior Executive Engineer, Executive Engineer, Engineers, CTA)
   - ☐ Non managers (STA below- perform operational activities or administrative or customer related works)

6. Number of years in the organisation
   - ☐ < 5 years  ☐ 5 years-10 years  ☐ >10 years

7. Number of years in current position
   - ☐ < 5 years  ☐ 5 years-10 years  ☐ >10 years

8. In the last year, how frequent do you experience planned improvement (ie project based, system replacement, technology advancement)
   - ☐ None  ☐ < 2times  ☐ > 2 times
9. In the last year, how frequent do you experience unplanned improvement in a year (ie. incremental improvement, improvement in procedures, operational activities, reshuffling, loss of staff due to being promoted elsewhere, major disruption, crisis that causes chaos and requires quick improvisation to adapt to normal condition)

- None
- < 2 times a year
- 2-5 times a year
- > 5 times a year

10. Do you currently feel ready to support your organisational improvements considering the need for improvement and the ability of the organisation to facilitate the improvement?

- Yes
- No
- Not sure
SECTI0N 2. ORGANISATIONAL CLIMATE FACTORS TO DRIVE READINESS FOR IMPROVEMENT

PART I

The first part of this section (Part I) intends to identify a LIST of the domain influential factors that you as a person or taskforce group think, will influence your readiness to support improvement. This implies to planned and unplanned improvement.

The readiness to support improvement is reflected in the way you, as a person or taskforce group think and feel that the improvements are necessary and that the organisation is able to facilitate those improvement, thus influencing your behaviour to support improvement. Readiness is reflected in the following statements:

1. I find the improvement refreshing
2. I have a good feeling about the improvement
3. I am willing to make a significant contribution to the improvement
4. I want to devote myself to the process of improvement.

As a person or part of a taskforce group, which factors do you think are the most INFLUENTIAL to prepare your readiness (both mentally and physically) to support either or both planned and unplanned improvements? Please tick in both columns whether the factors are considered influential to make you feel READY to support improvement. You can also ADD other additional factors in either or both columns if you think those factors are equally influential.

<table>
<thead>
<tr>
<th>INFLUENTIAL FACTORS (Domain dimension)</th>
<th>Planned improvement</th>
<th>Unplanned improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. History of past improvement achievement</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2. Trust in top management</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
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<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFLUENTIAL FACTORS (Domain Dimensions)</td>
<td>Planned Improvement</td>
<td>Unplanned improvement</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>(You can add other influential factors, other than the list given and tick in their relevancy in either or both columns of planned or unplanned improvement)</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
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<td>30.</td>
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<td>31.</td>
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</tbody>
</table>
PART II

For Part II of Section 2, we request you to identify from the given list of factors and those factors that you may have added to the list, the most **ESSENTIAL** factors (less or not more than 10 factors) required to trigger your readiness as a person or group to support improvement. Without these essential factors, readiness to support improvement cannot be achieved. Please tick their relevancy in either or both columns of Planned and Unplanned improvement.

<table>
<thead>
<tr>
<th>ESSENTIAL</th>
<th>Planned</th>
<th>Unplanned</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of past improvement achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in top management</td>
<td></td>
<td></td>
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<tr>
<td>Communication</td>
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<tr>
<td>Participation</td>
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<tr>
<td>Conduciveness to unlearn</td>
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<tr>
<td>Top management support</td>
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<td></td>
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<tr>
<td>Job Satisfaction</td>
<td></td>
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<tr>
<td>Self efficacy and personal valence (confident that you are able to carry</td>
<td></td>
<td></td>
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<tr>
<td>out improvement and feel that you will benefit from the improvement in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>terms of rewards, promotion, incentive)</td>
<td></td>
<td></td>
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<tr>
<td>Group efficacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager/employee relationship</td>
<td></td>
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</tr>
<tr>
<td>Employee’s job demands</td>
<td></td>
<td></td>
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<tr>
<td>Logistic and system support</td>
<td></td>
<td></td>
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<tr>
<td>Flexibility in policies and procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived organisational support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management’s opportunity to lead continuous improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal customer focus (employees) and team processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common understanding of quality and customer wants and needs</td>
<td></td>
<td></td>
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<tr>
<td>Clear task roles and responsibility</td>
<td></td>
<td></td>
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<tr>
<td>Clear expectation and direction from senior managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Other factors that you may have included in Part I)</td>
<td></td>
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</tbody>
</table>

Thankyou for your participation
APPENDIX 2 – Sample of Phase 1 interview questions

QUALITATIVE INTERVIEW SESSION (ORGANISATIONAL CONTACT)

Qualitative Interview question (top management)
Participant – Organisational Contact (Permanent Secretary (MOD), Director General (PWD), Deputy Director General (PWD), Directors (PWD))

Organisation:
Ministry of Development PWD

Note: For improvements to succeed and sustain, it is important to align both the ‘hard’ management and ‘soft’ management aspect. Hard management refers to management approaches or IT/system development, whereas the soft management refers to the human aspect. This study will focus on the soft aspect of management ie employees’ readiness to support improvements (Readiness refers to the belief, will and confidence to support improvement).

This study intends to develop a Readiness Assessment Tool to indicate the level of individual and group readiness in the organisation to support organisational improvements. In order to develop this tailored assessment tool, we need to find out what influential factors or organisational climate makes an employee or a taskforce group feel READY and CONFIDENT to commit and support improvements for the Ministry and Department. The list of influential factors may come from previous research studies in similar organisation and from the voice of the participants (employees and taskforce group). The list is filtered further to identify the likely maximum of TEN (essential factors may be less than ten) most ESSENTIAL factors that is needed to trigger READINESS, in facing uncertainties and chaos when implementing improvements. These ESSENTIAL factors, without which, readiness will not be achieved to support those improvements. The improvements may refer to both planned and unplanned.

Interview Question (Round 1)

1. In order to succeed improvement, whether it is planned or unplanned, the organisation needs the full support of its employees. This means having the employees prepared mentally and physically to take immediate action to support improvement. Readiness means having the belief on the need for improvement and confidence that the
organisation is able to facilitate those improvements, thus influencing the willingness and behavior of employees to support improvement. It is also important for employees to be aware of the vision, mission and future direction of the organisation in order to relate to each employees’ line of involvement for their efforts to be meaningful.

What is the current vision, goal and mission of the Ministry or Public Works? What is the future direction? How is this communicated down the organisation?

2. Is there any means or indicators to know the present state of the organisation’s performance? What type of organisation and way of management do you visualize the future state?

3. With the strategic plans in place (if any) in the Ministry or PWD, how are the improvement activities in each organisation or Department aligned to the Ministry of PWD’s objective.

4. In the last one year, can you give examples of significant planned and unplanned improvements that the organisation has experience that can relate to employees’ involvement?

5. From your experience, what are the major frustrations or difficulties if given further attention could expedite and succeed those improvements? (Examples can refer to ‘hard’ and ‘soft’ management aspect). Can you elaborate on each aspect or issue?

6. Referring to the planned and unplanned improvements, do you think that the organisation is able to facilitate those improvements in order for employees to participate and support fully? Can you give examples in what way the organisation is doing this?

7. In your view, what influential factors do you think are important for employees’ and taskforce group to be ready to support improvements? In planned and unplanned.

8. In your view, what are the most essential factors, without which the employee’s readiness cannot be achieved to support improvements? In planned and unplanned.

9. Do you feel that planned improvements always come out as unplanned? If so, in what way? And do you think that readiness of employees is important to make it successful?

10. Do you feel that an readiness assessment tool would assist managers?

Thank you for your participation.
QUALITATIVE INTERVIEW SESSION.

Qualitative Interview question (individual and focus group)
Participant – top and middle managers and workgroups

Organisation:

Water Services Dept. □  Road Dept. □  Drainage and Sewerage Dept. □

Individual □  Group □

Note: This study intends to find out what INFLUENTIAL factors makes yourself as a person or as a taskforce group feel READY and CONFIDENT to commit and support improvements in your Department. This study also needs to identify the TEN most ESSENTIAL factors that is needed to trigger READINESS, in facing uncertainties and chaos when implementing improvements. The improvements may refer to both planned and unplanned.

Interview Question (Round 1)

1. In order to succeed improvement, whether it is planned or unplanned, the organisation needs the full support of its employees. This means having the employees prepared mentally and physically to take immediate action to support improvement. Readiness means having the belief on the need for improvement and confidence that the organisation is able to facilitate those improvements, thus influencing the willingness and behaviour of employees to support improvement.

This study intends to understand what factors would influence your readiness, as a person or taskforce group to support improvements. In relation to your experience of planned improvement in the last year, what influential factors do you think would influence your belief and willingness to support improvement? How about in the case of unplanned improvement? (Examples of planned and unplanned improvement and its definition can be referred to the information sheet)

2. Out of the factors that you mentioned, what factors do you think are the most ESSENTIAL, without which you cannot achieve readiness to support those improvement. This refers to planned and unplanned improvement.

3. What are your major frustrations in implementing improvements, that might hinder your readiness to fully support improvement? In planned improvement and unplanned improvement.
4. Do you think that a readiness assessment tool would be useful for management to improve employees' readiness?

5. In your experience, do you feel that a planned improvement always comes out as unplanned? If so, in what way? Do you feel improvements have succeeded in the past? If not, why?

6. In your experience, how have improvements been successfully implemented, particularly when incidents get chaotic?

Thank you for your participation
## APPENDIX 3 – LIST OF PARTICIPANTS WITH DESIGNATED POST

### QUALITATIVE INTERVIEW SESSION

<table>
<thead>
<tr>
<th>Bil</th>
<th>Code</th>
<th>Designation</th>
<th>Time in</th>
<th>Time out</th>
<th>Date</th>
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<td>3.55pm</td>
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N=40 (Director -1, Assist. Director-1, SEE-2, EE-2, Eng-16, CTA-14, STA-3, consultant-1)

DEPARTMENT ROAD DEPARTMENT (DOR) – ORGANISATION B

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N=41 (Director-1.Assist.Director-1,SEE-2,EE-2,Eng-15,CTA-12,STA-5,TA-3)

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N=38 (Director-1, Assist. Director-1, SEE-1, EE-2, Eng-11, CTA-17, STA-5)

TOTAL RESPONDENTS IN INTERVIEW SESSION is 119 respondents from a total of N=123 participants. 4 were on leave. These participants comprise of top managers, middle managers and operational managers who are drivers for improvement from four public organisation under Public Works Department.
## 1. IMPROVEMENT CONTENT:

We argue on a synergy of both planned and unplanned:

Constant flux of chaos exists in both planned and unplanned improvements. Thus requiring constant flux of readiness.

<table>
<thead>
<tr>
<th>Components</th>
<th>Percentage of interviewed respondents who agreed</th>
<th>Sample of quotations</th>
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</thead>
<tbody>
<tr>
<td>90%</td>
<td>'No matter how well we plan, it cannot be 100% planned. It’s only a plan. There’s a lot of environmental factors, social factors, human factors, so obviously, there will be some unplanned factors. I think how to resolve this is only part of the learning process. I don’t think we can resolve it. We just have to take the unplanned and see how we can improvise this.' (P1.A3).</td>
<td></td>
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<tr>
<td></td>
<td>'When disaster happens in a planned improvement, say GIS; it becomes chaotic. Sometimes the data inputted into the GIS system may not be sufficient in terms of providing adequate information to tackle the chaos situation. So, we may have to add our competency through collective experience from other peers. So we need to improve further based on experience and history. Lack of data, information, coordination, say in GIS system where information given by other Dept. like survey or land Dept may not be sufficient and ad hoc development beyond our control where it affects downstream, like a domino effect all led to chaos and unplanned event, although coming from a planned improvement.' (P1.A1)</td>
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<tr>
<td></td>
<td>'Yes it does happen. We have to put into our mind that every process will not happen in accordance to what we planned. Say for example, the slope failure project. We planned the work activities but in reality, it doesn’t come out as planned due to weather condition, sometimes it rains, suddenly everything go down. So, its caused by nature, human say contractors having difficulties financially and other'</td>
<td></td>
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2.IMPROVEMENT CONTEXT AND PROCESS:
We argue that conduciveness for employees’ readiness to support improvement lies in the desired climate as perceive by employees. The essential factors may trigger minimum employees’ readiness and influential factors may further influence higher level of employees’ readiness.

**ESSENTIAL CLIMATIC FACTORS:**

a) Communication 54%-Planned 55%-Unplanned

‘The most essential as I said previously is communication among the various units, all levels, all hierarchy. As I say, normally to me communication if not effective always hinder when I tried to communicate with other units, it’s hard cause sometimes things that may take an hour may end up longer.’ (P1A28)

b) Participation 87%-Planned 82%-Unplanned

‘Teamwork is what matters in both situation, planned and unplanned. Communication and participation is crucial and having concrete decision made in meetings.’ (P1.C96)

c) Top management’s trust in subordinates 86%-Planned 88%-Unplanned

‘In planned improvement, if I’m doing the job and the top says that I don’t have to do it or that they portray their lack of trust in me to do the job, I’ll say it’s ok but I need to know why. So trust and communication is important and essential. For unplanned , its the same. Participation is important as well and you have to be proactive not to wait for someone to tell you what to do.’(P1.B74)

d) Clear task roles and responsibilities 56%-Planned 46%-Unplanned

‘Clear task roles and responsibility is also important. We have ISO but I feel that the job description is different. So I feel that clarity of task roles and responsibility, knowing and understanding what to do in terms of the scope of work is essential. This
refers to both planned and unplanned improvement.'(P1.A16)

<table>
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<tr>
<th>INFLUENTIAL CLIMATIC FACTORS:</th>
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</thead>
<tbody>
<tr>
<td>a) Efficacy: Self efficacy</td>
<td>51%-Planned</td>
<td>43%-Unplanned</td>
</tr>
<tr>
<td>Group efficacy</td>
<td>43%-Planned</td>
<td>21%-Unplanned</td>
</tr>
<tr>
<td>Job knowledge and skills</td>
<td>21%-Planned</td>
<td>16%-Unplanned</td>
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</tbody>
</table>

'For unplanned improvement, first of all, having the confidence in yourself and your group that you able to overcome the problem.'(P1.A35)

'If some of the group members don't feel confidence, then we have to give them the confidence, by believing in ourselves. Its the sharing of knowledge and experience that makes it work.'(P1.A30)

'Firstly, the scope of improvement, what are the improvement for, what are we going to improve, that we have the knowledge to be a part of that improvement.' (P1.A19)

'Importantly, qualification, skilled and having the job knowledge that total to having the confidence to do the job. Without it, the person tends to give a lot of excuses not to do the job. Secondly, the attitude must be right, the willingness to do the job.' (P1.A12)

| b) Organisational trust in top management: |  |  |
| Top management support | 16%-Planned | 17%-Unplanned |
| Trust in top management | 51%-Planned | 50%-Unplanned |

'Support from the top is important, we faced problems, he’s the one that we refer to. We want clear direction from the top, clear task role, that’s very important. He’s more experience than us so somebody who’s holding the vision, should be more experienced than us in order to be able to guide us. But if somebody on top gets promoted and may not be experienced then it affects our readiness in trusting him. If he cannot portray his competency to hold the vision in terms of relying too much on us and not giving clear directive role, then our feeling in supporting the improvement is just mutual, we just do trial and error.' (P1.O87)
### Communication

<table>
<thead>
<tr>
<th>Category</th>
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<th>Unplanned</th>
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<tbody>
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<td>Communication</td>
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<td>55%</td>
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‘Communication and relay of information and support whether it takes in the form of feedback or instruction takes place both ways from the top, middle and down and bottom up to make sure everybody understand as the instruction is cascaded down. Support takes place between units, section within the organisation and sub offices. That road of communication as in the networking system (hierarchy) is there already but we have to make use of it through instruction.’ (P1.A38)

### c) Organisational trust

<table>
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<th>Trust Type</th>
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<th>Unplanned</th>
</tr>
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<td>88%</td>
</tr>
<tr>
<td>Self valence</td>
<td>51%</td>
<td>43%</td>
</tr>
<tr>
<td>Trust in peers</td>
<td>33%</td>
<td>31%</td>
</tr>
<tr>
<td>Clear expectation and direction From top management</td>
<td>38%</td>
<td>38%</td>
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</tbody>
</table>

‘Trust is also important, the trust of the top management in our decision, the working environment which is conducive to learn, knowing the benefits that comes to me.’ (P1.B43)

‘Trust among my peers is important especially when they are older than me and more experience. Trust among peers is important for me.’ (P1.C94)

‘I prefer my superiors to be clear of what they want me to do, and advice us which one is better, clear transparent of their expectation and direction.’ (P1.B59)

‘Clear direction and clear task roles as well as continuous guidance, that makes us confident and ready to support.’ (P1.C96)

### d) Top management support and participation:

<table>
<thead>
<tr>
<th>Support Type</th>
<th>Planned</th>
<th>Unplanned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management support</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Participation</td>
<td>87%</td>
<td>82%</td>
</tr>
</tbody>
</table>

‘Meaning in both planned and unplanned, as long as we have the support from the top management, teamwork from subordinates and clear direction from the boss, we are ready to support.’ (P1.A25)

‘But the participation at every level in terms of accepting and listening to our ideas increases our sense of belonging. This includes top management. There’s no boundary.’ (P1.C119)
We argue that readiness is multilevel and multidimensional and need to be aligned.

As you go up higher, you look things at a different angle. Certain lower, you look at technical level, but as you go higher, the more global view you look at things. Your mind keep up on opening up and opening up. When you talk among other superiors, they will tell you why the change or improvement is required, it’s healthy for you. So, communication and clear direction is important not only from the senior management but even when you talk to your friends, colleagues and lower staff on their ideas. (P1.B71)

‘We need support from the people, from the team, from the top managers. Sideways also.’ (P1.A3)

Of course, our people, our team as in teamwork, we work together, information, its actually the strength of our organisation, support from the top and other Departments or stakeholders. When we refer to the strength, I refer to the willingness and confidence of our people, for instance, like ISO. If we don’t have the confidence, we tend to be negative and likely to be pulled to the negativeness but if we think positive and confident, even if the resources is not enough but we can make it work. . Importantly, it’s the intention, the feeling of unselfishness and not trying to take advantage of others because if not it won’t work. Not thinking of the action as a stepping stone, you are focussing on the task and working as a team towards public. Basically you know what you are working for.’ (P1.A1)
<table>
<thead>
<tr>
<th>Feeling</th>
<th>Intention</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief in top management and belief in improvements and its benefits</td>
<td>personally, its the believe in the ISO, influence by the presentation by the key people who are responsible for bringing in the awareness, to trust in that believe that this is the right thing to be done for the organisation. Once they present to us what is important about ISO and we have that believe, then that's going to drive us to be ready.</td>
<td>97%</td>
</tr>
<tr>
<td>Affective (feeling): feeling of responsibility, feeling of wanting to help, feeling of obligation, obedience to God and loyalty to the monarchy</td>
<td>“It's the sense of wanting to help others that makes us ready to think what is necessary for us to do to carry out the improvements whether it relates to finding resources, relying on our knowledge, getting the support from the top and our peers in terms of getting the cooperation and support from them and other units, Departments through networking. ‘(P1.B58)</td>
<td>98%</td>
</tr>
<tr>
<td>Intentional (act): selfless act, cognitive and affective aligned</td>
<td>‘It's our obligation to the nation.’(P1.B56)</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td>‘It's about understanding what the customer wants that makes us willing. Its our responsibility. Its also the Islamic spirituality values that if you do good to the public, the benefits that public get returns to you in blessing. So knowing that belief and the fact that you are making people happy makes you ready. Its knowing the value of service that you are giving.’(P1.A22)</td>
<td></td>
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</tbody>
</table>
APPENDIX 5 - Sample of final survey itemised questionnaire

<table>
<thead>
<tr>
<th>Participant Information for PhD Research Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness for Public service improvements in Brunei Darussalam</td>
</tr>
<tr>
<td>Researcher Contact</td>
</tr>
<tr>
<td>Nor Imtihan Hj Abd Razak</td>
</tr>
<tr>
<td>8774558</td>
</tr>
<tr>
<td><a href="mailto:norimtihan.razak@gmail.com">norimtihan.razak@gmail.com</a></td>
</tr>
<tr>
<td>Description</td>
</tr>
</tbody>
</table>

Thank you for agreeing in this research looking into Employees Readiness for Public Service Improvement in Brunei Darussalam, which is being conducted as part of my PhD studies with Loughborough University. The field study will be selecting few Departments under Public Works, in Brunei.

**AIM** : The purpose of this study is to identify the most Influential factors to achieve optimum continuous readiness and identify the most Essential factors to trigger minimum readiness to support improvement. Achieving readiness means having the belief, confidence and willingness (positive attitude) to fully commit and support improvement. This is in line with Public Works motto ‘Bersedia Berkhidmat’ meaning ‘Ready to serve’.

This survey represents **Phase 2** of the study, which involves the selection of relevant statements that will measure each domain factor (selected from Phase 1 of the study) that is believed to influence your readiness. The domain factors selected in Phase 2 represent the results from the survey and interview session in Phase 1 involving the top, middle and non managers in the three Departments ie Road, Drainage and Sewerage, Water Services Department and Technical Services Department.

These selected factors represent the common Influential and Essential factors identified in both planned and unplanned improvements. The final selection list of statements in Phase 2 of the study, by participants will indicate the measurement scale of relevant domain factors that is believed to influence readiness. This will led to the development of an organisational climate assessment tool to achieve minimum (ESSENTIAL organisational climate factors) readiness and
optimum continuous readiness (INFLUENTIAL organisational climate factors) to support improvement.

The questionnaire contains two parts:-

**Part 1**

a) From the list of statements given, please select the most INFLUENTIAL statements that you think will influence your being ready to support planned and unplanned improvements? Please tick each statement’s relevancy between Strongly agree to strongly disagree.

**Part II**

b) Additional comments to improve the questionnaire

**Examples of Planned Improvement**: Projects based initiatives, Upgrading of IT, New IT or technology system, Upgrading of existing operational system, changed in policy, improvisation from key performance monitoring.

**Examples of Unplanned Improvement**: Incremental improvement, improvement in procedures, operational activities, reshuffling, loss of staff due to being promoted elsewhere, major disruption, crisis that causes chaos and requires quick improvisation to adapt to normal condition.

The findings from this survey study will led to the development of the contents of a proposed climate assessment tool for readiness. The assessment tool will indicate the employees' readiness in three levels. **Firstly**, the current level of readiness, **Secondly**, the minimum factors that need improvement to trigger readiness (transitional state of building readiness) and **Thirdly**, the required factors that need strengthening to foster and sustain readiness to support continuous improvement (Future State of continuous readiness). The tool will be able to demonstrate its potential to managers in strategising their planning and actions to manage the organisation employees’ readiness to succeed improvements in planned or unplanned improvement.

**Participation**

Your participation in this study will involve completion of the questionnaire which is estimated to take 20 minutes. Completion of the question is voluntary and your decision of whether to participate or not will in no way impact upon your current or future relationship with the organisation. If you do not agree to participate, you can withdraw from participation at any time prior to completing the questionnaire. However, as the question is anonymous, it is not possible to withdraw once your questionnaire has been submitted.

**Expected benefits**

It is expected that this project will not benefit you personally but it is hoped that the results of this study will inform the management level who are responsible for implementing improvements.

**Risks**

There are no risks beyond normal day-to-day work associated with your participation in this study.
Confidentiality

All comments and responses are anonymous and will be treated confidentially. The names of each participant are not required in any of the responses. Results will be reported within the PhD thesis and elements of it will be reported at conferences and in journals. In all of these situations, neither individuals nor organisations will be identified and the level of information provided about participants will not allow any identification.

The return of the completed questionnaire is accepted as an indication of your consent to participate in this study.

Questions/further information about the study

Please contact the researcher named above to have any question answered or if you require further information about the study.

Concern/complaints regarding the conduct of the project

The University has a policy relating to Research Misconduct and Whistle Blowing which is available online at [http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm](http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm). If you do have any concerns or complaints about the ethical conduct of the study, you may contact the above website.

Consent to participate

The return of the completed questionnaire is accepted as an indication of your consent to participate in this study.
### SECTION 1. BACKGROUND INFORMATION

1. **Gender**
   - [ ] Male
   - [ ] Female

2. **Have you been involved in a task force group?**
   - [ ] Yes
   - [ ] No

3. **Age range**
   - [ ] 18-25 years
   - [ ] 26-45 years
   - [ ] 46 – 50 years
   - [ ] 51-60 years

4. **Highest qualification**
   - [ ] Masters and above
   - [ ] Degree
   - [ ] Diploma
   - [ ] Diploma below

5. **Job clarification**
   - [ ] Top Managers (determines the direction of the organisation or Department and directs its functioning through other managers)
   - [ ] Middle managers (performs specific tasks or manages a section or unit –Senior Executive Engineer, Executive Engineer, Engineers, CTA)
   - [ ] Non managers (STA below- perform operational activities or administrative or customer related works). Please state your current post.

6. **Number of years in the organisation**
   - [ ] < 5 years
   - [ ] 5 years-10 years
   - [ ] >10 years

7. **Number of years in current position**
   - [ ] < 5 years
   - [ ] 5 years-10 years
   - [ ] >10 years

8. **In the last year, how frequent do you experience planned improvement (ie project based, system replacement, technology advancement)**
   - [ ] None
   - [ ] < 2times
   - [ ] > 2 times

9. **In the last year, how frequent do you experience unplanned improvement in a year (ie incremental improvement, improvement in procedures, operational activities, reshuffling, loss of staff due to being promoted elsewhere, major disruption, crisis that causes chaos and requires quick improvisation to adapt to normal condition)**
   - [ ] None
   - [ ] < 2times a year
   - [ ] 2-5 times a year
   - [ ] > 5 times a year

10. **Do you currently feel ready to support your organisational improvements considering the need for improvement and the ability of the organisation to facilitate the improvement?**
    - [ ] Yes
    - [ ] No
    - [ ] Not sure
PART I CONTENT CONSTRUCT OF READINESS ASSESSMENT TOOL

This part contains statements which describe and measure the domain common INFLUENTIAL and ESSENTIAL factors that have been selected in PHASE 1 of the study. We are interested in finding your views and agreement on the relevancy of each statement under planned and unplanned improvement. In answering the questions, try to relate to your experience affected by those improvements in the past year and TICK in accordance to your perceived importance of the statement in relation to influencing your readiness for either or both planned and unplanned improvement.

<table>
<thead>
<tr>
<th>Planned and Unplanned Improvement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Please tick the relevancy of statement in measuring Influential and Essential factors in each row)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1. The top management fulfils its promises.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. The top management consistently implement its policies in the Department.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. I trust my top management to be fair, honest, sincere and unbiased in their decision making and action.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. The two way communication between the top manager and the subordinates is very good.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>5. I am regularly informed about how the improvement is going.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>6. It is clear how the objectives of the improvement can be put in practice.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>7. There is good communication between management team and staff members concerning the organisation’s policy or plans towards improvement.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Information concerning the improvement does not reach us.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Not sure</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
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<tr>
<td>9. We are sufficiently informed of the progress of improvement.</td>
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<tr>
<td>10. Improvement are always discussed with the staff concerned.</td>
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<tr>
<td>11. Decision concerning improvement are consulted with affected staff members.</td>
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<tr>
<td>12. Frontline staff and operational staff can raise issues for discussion.</td>
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<tr>
<td>13. Work problems and ideas are openly discussed.</td>
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</tr>
<tr>
<td>14. It is possible to talk about outdated regulation and ways of working.</td>
<td></td>
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</tr>
<tr>
<td>15. The management supports the improvement process unconditionally (legislative and system support, technical, personal and administrative support and financially).</td>
<td></td>
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</tr>
<tr>
<td>16. The top and senior management are actively involve with the improvement.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>17. The top and senior managers coach us very well about implementing improvement.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18. The top and senior management are able to portray good leadership to suit the improvement.</td>
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</tr>
<tr>
<td></td>
<td>(Please tick the relevancy of statement in measuring Influential and Essential factors in each row)</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Not sure</td>
<td>Agree</td>
</tr>
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<td>-------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>19.</td>
<td>Top and senior management provide sufficient attention to the personal consequences that the improvement could have for their staff members.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>When implementing improvement, I feel I can handle it with ease.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I have the skills that are needed to make this improvement work.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I do not anticipate any problems adjusting to the work I will have when this improvement is adopted.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>When I set my mind to it, I can learn everything that will be required when the improvement is adopted.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24.</td>
<td>My past experience make me confident that I will be able to perform successfully after this improvement is made.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
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<tr>
<td>25.</td>
<td>When implementing improvement, we feel that our group can handle it with ease.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>26.</td>
<td>We, as a group have the skills that are needed to make this improvement work.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>We, as a group anticipate problems adjusting to the work we will have when this improvement is adopted.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>When we set our mind to it, we, as a group can learn everything that will be required when the improvement is adopted.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Not sure</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<tr>
<td>---------------------------------------------------------------------------</td>
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<tr>
<td><strong>(Please tick the relevancy of statement in measuring Influential and Essential factors in each row)</strong></td>
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</tr>
<tr>
<td>29. Our past experience make us confident that we will be able to perform successfully after this improvement is made.</td>
<td></td>
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</tr>
<tr>
<td>30. I know what is expected of me at work.</td>
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<tr>
<td>31. My task role and responsibility at work is clearly explained.</td>
<td></td>
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<tr>
<td>32. My commitment comes from knowing my task role and responsibility.</td>
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<tr>
<td>33. My top and senior management informs me of their expectation and clearly provides direction when necessary in implementing an improvement.</td>
<td></td>
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<tr>
<td>34. My task is clearly explained and directed by the top and senior managers.</td>
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<tr>
<td>35. There is cooperation and teamwork among my peers/colleagues.</td>
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<tr>
<td>36. I had the support of my peers/colleagues during the improvement.</td>
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<tr>
<td>37. We are encourage to work with staffs in other Departments to solve problems.</td>
<td></td>
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<tr>
<td>38. Working with my peers/colleagues is excellent and trustworthy.</td>
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</tr>
</tbody>
</table>
### Planned and Unplanned Improvement

(Please tick the relevancy of statement in measuring Influential and Essential factors in each row)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. When something goes wrong, we look at the way we do our work rather than blaming others.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>40. I have the knowledge and skills to make this improvement work.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
<tr>
<td>41. Information that relates to the scope of work is readily available and accessible.</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>42. I find the improvement refreshing.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
<tr>
<td>43. I have a good feeling about the improvement.</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
<tr>
<td>44. I experience the improvement as a positive process.</td>
<td>[ ]</td>
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</tr>
<tr>
<td>45. I am willing to make a significant contribution to the improvement.</td>
<td>[ ]</td>
<td>[ ]</td>
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<td>[ ]</td>
</tr>
<tr>
<td>46. I want to devote myself to the process of improvement.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
<tr>
<td>47. I am willing to put energy into the process of improvement.</td>
<td>[ ]</td>
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</tr>
<tr>
<td>48. Most improvement that are supposed to solve problems around here will make an impact.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>49. Overall, the proposed improvements are for the better.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
PART II ADDITIONAL COMMENTS TO IMPROVE THE QUESTIONNAIRE

We would appreciate if you could add in some comments to improve the questionnaire.

---

Thank You for your participation.
APPENDIX 6 — LIST OF PROBE QUESTIONS FOR PHASE 1 INTERVIEW

Examples of Probe questions

Q1: In relation to your experience of planned improvement in the last year, what influential factors do you think would influence your belief and willingness to support improvement? How about in the case of unplanned improvement?

Probe question:
  a) What factors makes you ready and unready to support improvements? In planned and unplanned improvements.
  b) What influential factors associated with top management, bottom level and colleagues who are at the same level relate to your readiness?

Q2: Out of the factors you mentioned, what factors do you think are Essential, without which you cannot achieve readiness to support those improvements. This refers to planned and unplanned improvement.

Probe question:
  a) When you feel fear or anxiety over any improvement, what are the factors that you must have to trigger your readiness to support? In planned and unplanned.

Q3: What are your major frustrations in implementing improvement, that might hinder your readiness to fully support improvement? In planned and unplanned improvement.

Probe question:
  a) What frustrates you most that would make you feel unready to support improvement? In planned and unplanned improvement.

Q4: Do you think that a readiness assessment tool would be useful for management to improve employee’s readiness? Clearly understood by participants. No need for probe question.

Q5: In your experience, do you feel that a planned improvement always comes out as unplanned? If so, why?

Probe question:
  Do improvements turned out as planned? If not, in what way do they become unplanned?

Q6: In your experience, how have improvements been successfully implemented, particularly when incidents get chaotic?

Probe question: How did you cope with chaos and still be able to succeed improvements?
APPENDIX 7 – SAMPLE OF SURVEY QUESTIONNAIRE IN MALAY VERSION

KAJISELIDIK (KAJIAN FASA 2)

<table>
<thead>
<tr>
<th>Code : P2.B____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informasi Peserta bagi projek kajian PhD</td>
</tr>
<tr>
<td>Kesediaan bagi Pembaikan Perkhidmatan Orang Ramai di Negara Brunei Darussalam</td>
</tr>
<tr>
<td>Menghubungi Pengkaji</td>
</tr>
<tr>
<td>Nor Imtihan Hj Abd Razak</td>
</tr>
<tr>
<td>8774558</td>
</tr>
<tr>
<td><a href="mailto:norimtihan.razak@gmail.com">norimtihan.razak@gmail.com</a></td>
</tr>
<tr>
<td>Keterangan</td>
</tr>
</tbody>
</table>


TUJUAN:

Tujuan kajian ini adalah bagi mengenal pasti faktor faktor yang PERLU dan boleh MEMPENGARUHI kesediaan awda dalam menyokong iniatif pembaikan Jabatan secara berterusan. Mencapai KESEDIAAN sepenuhnya bagi seseorang pegawai atau kakitangan bermakna mempunyai kepercayaan, keyakinan dan keiklasan (sikap yang positif) dalam memberi komitment dan sokongan sepenuhnya dan berterusan bagi melaksanakan pembaikan. Ini adalah selari dengan motto Jabatan Kerja Raya iaitu ‘Bersedia Berkhidmat’.

Kajian ini adalah FASA II dan kandungan FASA II melibatkan AWDA untuk MEMILIH penyataan yang sesuai dari senarai penyataan dalam kajiselidik ini. Setiap penyataan yang berhubung kait kepada faktor faktor yang PERLU dan boleh

Keadaan faktor pilihan ini adalah dalam keadaan melaksanakan iniatif perbaikan secara berancang (perlaksanaan projek atau peningkatan sistem kerja) dan tidak berancang (crisis atau ‘emergency’) yang menjadi cabaran kerja setiap hari. Pilihan AWDA dalam FASA II ini akan membentuk satu alat penilaian bagi mengukur sejauh mana kesediaan pegawai dan kakitangan dalam sebuah Jabatan dalam mendokong dan menjayakan iniatif perbaikan yang dirancang atau dijalankan.

Mengenali faktor yang PERLU adalah tahap kesediaan seseorang yang minima dalam mendokong setiap iniatif perbaikan. Ini bererti seseorang pegawai atau kakitangan akan bersedia untuk melaksanakan iniatif perbaikan akan tetapi tidak mempercayai atau merasa yakin untuk mendokong iniatif perbaikan sepenuh hati. Tanpa faktor yang Perlu di dalam organisasi akan menurun kepada budaya organisasi yang negatif ie pegawai dan kakitangan yang sentiasa membangkang, melarikan diri dari komitmen kerja, ketidak hadiran dalam kerja dan berlengah dalam menyiapkan kerja.

Mengenali faktor yang MEMPENGARUHI akan membawa ke tahap kesediaan yang tinggi dimana kesediaan pegawai dan kakitangan adalah sepenuh hati dan yakin dalam mendokong dan menjayakan iniatif perbaikan secara berterusan.

Kajiselidik ini mempunyai dua bahagian:

Bahagian I

a) Dari senarai ulasan yang disediakan, sila PILIH penyataan yang awda fikirkan sesuai bagi mempengaruhi kesediaan awda dalam mendokong iniatif perbaikan secara Berancang dan Tidak Berancang. Sila TANDA setiap penyataan yang berkenaan antara lingkungan Kuat Bersetuju ke Kuat Tidak Bersetuju.

Bahagian II

b) Komen tambahan bagi meningkatkan kajiselidik.

Contoh Pembaikan secara Berancang : Iniatif projek projek, Peningkatan IT, Pembaharuan IT atau sistem teknologi, Peningkatan sistem operasi yang ada, perubahan polisi dan prosedur, peningkatan melalui pemantauan pencapaian

Contoh Pembaikan secara Tidak Berancang: Pembaikan secara beransur, Pembaikan dalam prosedur, aktiviti operasi, pertukaran pegawai dan kakitangan, kehilangan pegawai dan kakitangan disebabkan oleh kenaikan pangkat di Jabatan lain, penjejasan perkhidmatan
yang utama, krisis yang menyebabkan kekacauan dan memerlukan pembaikan segera bagi memulihkan keadaan kesediakala.

Melalui pemilihan AWDA, pembetukan penilaian kajiselidik ini akan mengukur kedudukan organisasi Jabatan dalam menjayakan initiatif initiatif pembaikan dengan memperlihatkan kesediaan pegawai dan kakitangan dalam tiga tahap :-

- Tahap PERTAMA, kesediaan pegawai dan kakitangan didalam organisasi yang sedia ada,

- Tahap KEDUA, kesediaan pegawai dan kakitangan didalam organisasi yang minima (bersedia tapi tidak sepenuh hati) dan

- Tahap KETIGA, kesediaan pegawai dan kakitangan didalam organisasi yang sangat tinggi (bersedia sepenuh hati secara berterusan).

Peralatan ini adalah berpotensi bagi pihak pengurusan dalam mensyorkan kejayaan setiap initiatif dengan memberi perhatian terhadap kesediaan pegawai dan kakitangan dalam Jabatan. Langkah ini akan membantu dalam pembentukan sebuah organisasi yang positif dan berdaya tahan dalam menangani setiap cabaran pembaikan.

Penyertaan

Penyertaan awda dalam kajian ini melibatkan menamatkan kajiselidik ini dalam anggaran masa 20 minute. Menamatkan kajiselidik ini adalah secara sukarela and bukan paksaan dan keputusan awda samaada untuk menyertai atau tidak, tidak akan menjelaskan hubungan awda pada masa ini atau masa hadapan di dalam organisasi. Jika awda tidak bersetuju untuk menyertai kajian ini, awda boleh manarik diri pada bila bila masa sebelum menyertai kajiselidik ini. Walaubagaimanapun, memandangkan soalan tersebut tidak menyebut nama, adalah tidak wajar untuk menarik diri setelah menghadap kajiselidik ini.

Adalah dimaklumkan bahawa projek ini tidak akan mendatangkan faedah awda secara persendirian, akan tetapi adalah diharapkan hasil dari kajian ini akan memaklumkan pihak pengurusan yang mana bertanggungjawab dalam melaksanakan pembaikan.

Faedah yang diharapkan

Risiko

Tidak ada risiko yang berhubungkait dengan penyertaan awda dalam kajian ini yang melebihi hari hari bekerja.

<table>
<thead>
<tr>
<th>Pertanyaan/Maklumat tambahan mengenai kajian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sila hubungi pengkaji yang bernama diatas bagi menjawab sebarang pertanyaan atau jika awda memerlukan maklumat tambahan mengenai kajian tersebut</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Masaalah/Komplain mengenai perlaksanaan projek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universiti mempunyai polisi yang berhubungkait dengan perlaksanaan kajian yang tidak memuaskan dan peniupan ‘whistle’ yang mana disediakan secara online di <a href="http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm">http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm</a>. Jika awda menpunyai sebarang ketidaks puasan atau aduan mengenai etika perlaksanaan kajian, awda boleh menghubungi website di atas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Persetujuan untuk menyertai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maklumbalas dari kajiselidik yang telah disi lengkap dan dihadapkan adalah dinggap sebagai persetujuan untuk menyertai dalam kajian ini</td>
</tr>
</tbody>
</table>
BAHAGIAN 1. INFORMASI LATARBELAKANG

1. Jantina
   □ Lelaki   □ Perempuan

2. Adakah awda terlibat dalam kumpulan kerja?
   □ Ya   □ Tidak

3. Kadar Umur
   □ 18-25 tahun □ 26-45 tahun □ 46 – 50 tahun □ 51-60 tahun

4. Pendidikan tertinggi
   □ Sarjana dan keatas   □ Sarjana Muda □ Diploma □ Diploma kebawah

5. Jawatan
   □ Pengurus Atasan (Memastikan halatjuu organisasi atau Jabatan dan memastikan fungsi organisasi melalui ketua Bahagian.)
   □ Pengurus Pertengahan (melaksanakan kerja spesifik atau mengurus dan mentadbir satu bahagian atau unit – Jurutera Kerja Kanan, Jurutera Kerja, Jurutera, Pembantu Teknik)
   □ Operasi (STA kebawah – melaksanakan aktiviti operasi atau pentadbiran atau kerja yang berhubungkait dengan pelanggan.) Sila nyatakan jawatan terkini.
   ..............................................................................................................................

6. Kelamaan didalam organisasi atau Jabatan
   □ < 5 tahun □ 5 -10 tahun □ >10 tahun

7. Kelamaan didalam jawatan terkini
   □ < 5 tahun □ 5 -10 tahun □ >10 tahun

8. Sepanjang tahun lepas, berapa kali awda mengalami pembaikan yang berancang? (ie projek, penggantian atau pembaharuan sistem, teknologi yang terkini)
   □ Tidak ada □ < 2 kali □ > 2 kali
9. Sepanjang tahun lepas, berapa kali awda mengalami pembaikan secara tidak berancang? (ie pembaikan secara beransur, pembaikan prosedur, aktiviti operasi, pertukaran pegawai dan kakitangan, kehilangan kakitangan disebabkan oleh kenaikan pangkat ke Jabatan lain, penjejasan perkhidmatan yang major, krisis yang menyebabkan kekacauan dan memerlukan pembaikan yang segera bagi membaikpulih keadaan kesediakala)?

<table>
<thead>
<tr>
<th>Tidak ada</th>
<th>&lt; 2 kali setahun</th>
<th>2-5 kali setahun</th>
<th>&gt; 5 kali setahun</th>
</tr>
</thead>
</table>

10. Adakah awda merasa **BERSEDIA** pada masa ini dalam menyokong pembaikan organisasi memandangkan pembaikan perlu dibuat dan organisasi bersedia menyediakan kemudahan bagi pembaikan tersebut?

<table>
<thead>
<tr>
<th>Ya</th>
<th>Tidak</th>
<th>Tidak pasti</th>
</tr>
</thead>
</table>
BAHAGIAN 1  PEMBETUKAN KANDUNGAN PERALATAN KAJISELIDIK KESEDIAAN PEGAWAI DAN KAKITANGAN.

Bahagian ini mempunyai senarai penyataan yang menyukat faktor yang **PERLU** dan **MEMPENGARUHI** yang mana telah dikenalpasti dalam Fasa 1 kajian ini. Kami lebih berminat untuk mengetahui pendapat dan kesetujuan awda dalam kesesuaian setiap penyataan (‘statement’) dalam kaji selidik ini. Cuba kaitkan pengalaman awda yang terlibat dalam initiatif pembaikan atau peningkatan perkhidmatan sepanjang tahun lepas dan **TANDA** mengikut pendapat awda mengenai kesesuaian setiap penyataan atau ‘statement’ yang berhubungkait dalam mempengaruhi KESEDIAAN awda dalam melaksanakan pembaikan atau peningkatan perkhidmatan yang berancang dan tidak berancang.

<table>
<thead>
<tr>
<th>Pembukaan Yg Berancang dan Tidak Berancang</th>
<th>Sangat tidak</th>
<th>Tidak setuju</th>
<th>Tidak pasti</th>
<th>Setuju</th>
<th>Sangat bersetuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Sila tanda kenyataan yang awda Setuju atau Tidak bagi menyukat faktor Mempengaruhi dan Perlu dalam meningkatkan kesediaan awda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Ketua atasan memenuhi yang dijanjikan. (ie urusan pentadbiran, kewangan, pengurusan, sumber kemudahan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ketua atasan sentiasa melaksanakan dasar dalam Jabatan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Saya mempercayai ketua atasan dalam melaksanakan keadilan, kejujuran, keiklasan dan tidak berat sebelah dalam membuat keputusan dan tindakan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Saya sentiasa dimaklumkan bagaimana pembaikan kerja dijalankan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Komunikasi antara kumpulan pengurusan dengan kakitangan adalah sangat baik mengenai dengan dasar atau perancangan terhadap pembaikan kerja.

8. Informasi berkenaan dengan pembaikan kerja tidak sampai kepengetahuan kami.


10. Pembaikan sentiasa dibincangkan bersama pegawai and kakitangan berkenana.

11. Keputusan berkenaan dengan pembaikan kerja telah di rujuk dengan pegawai and kakitangan yang berkenaan.


13. Masaalah kerja dan buah fikiran kakitangan boleh dibincangkan secara terbuka.

14. Kakitangan boleh menyuarakan kepada pihak pengurusan mengenai undang undang atau prosedur kerja yang mereka fikirkan telah lapuk dan perlu diperbaharui.

(Pila tanda kenyataan yang awda **Setuju atau Tidak** bagi menyukat faktor Mempengaruhi dan Perlu dalam meningkatkan kesediaan)

<table>
<thead>
<tr>
<th>Pembaiakan Berancang dan Tidak Berancang</th>
<th>Sangat tidak bersetuju</th>
<th>Tidak setuju</th>
<th>Tidak pasti</th>
<th>Setuju</th>
<th>Sangat bersetuju</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- Komunikasi antara kumpulan pengurusan dengan kakitangan adalah sangat baik mengenai dengan dasar atau perancangan terhadap pembaikan kerja.
- Informasi berkenaan dengan pembaikan kerja tidak sampai kepengetahuan kami.
- Kami sentiasa dimaklumkan mengenai perkembangan perlaksanaan pembaikan kerja.
- Pembaikan sentiasa dibincangkan bersama pegawai and kakitangan berkenana.
- Keputusan berkenaan dengan pembaikan kerja telah di rujuk dengan pegawai and kakitangan yang berkenan.
- Kakitangan ‘Frontline’ dan operasi digalakkan menyuarakan sebarang isu bagi perbincangan.
- Masaalah kerja dan buah fikiran kakitangan boleh dibincangkan secara terbuka.
- Kakitangan boleh menyuarakan kepada pihak pengurusan mengenai undang undang atau prosedur kerja yang mereka fikirkan telah lapuk dan perlu diperbaharui.
15. Pihak pengurusan menyokong proses pembaikan kerja sepenuhnya (dari segi system and undang undang, persendirian and pentadbiran dan penyediaan peruntukan dan sumber sumber untuk melaksanakan pembaikan)


17. Ketua atasan mengajar kami dalam melaksanakan pembaikan secara terperinci.

18. Ketua atasan mampu menunjukkan kepimpinan yang baik dan sesuai untuk pembaikan kerja.


20. Dalam melaksanakan pembaikan kerja, saya mampu untuk melaksanakannya.

21. Saya memiliki kemahiran yang diperlukan bagi menjayakan pembaikan ini.

22. Saya tidak menjangka sebarang masalah dalam menyesuaikan kerja saya jika pembaikan kerja dilaksanakan.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>23. Bila saya sudah menetapkan minda saya, saya pasti boleh mempelajari apa saja yang diperlukan jika pembaikan kerja dilaksanakan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Pengalaman saya menyebabkan saya yakin dalam menjayakan pembaikan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Dalam melaksanakan pembaikan kerja, kami merasa kumpulan kami mampu menjayakan pembaikan dengan mudah.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Kami, sebagai kumpulan kerja menjangkakan permasalahan dalam menyesuaikan diri dalam kerja yang akan dilaksanakan melalui pembaikan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Bila kami menetap hati dan minda kami, sebagai kumpulan, kami mampu mempelajari apa saja yang diperlukan bila pembaikan dilaksanakan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Pengalaman kami meyakinkan kami dalam melaksanakan dan menjayakan pembaikan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
<td>Scale</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>30</td>
<td>Saya mengetahui apa yang di harapkan daripada diri saya di tempat kerja.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Tugas dan tanggung jawab saya di tempat kerja telah diterangkan secara jelas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Komitmen terbit daripada pengetahuan saya terhadap peranan dan tanggungjawab saya serta hubungankait kepada misi Jabatan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Ketua atasan memaklumkan pengharapan mereka dan menunjukkan bimbingan halatuju bila diperlukan dalam melaksanakan pembaikan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Kerja dan peranan saya telah diterangkan dengan jelas oleh ketua atasan saya.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Kerjasama dan kerja berkumpulan wujud dalam kalangan rakan sekerja saya.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Saya mendapat sokongan daripada rakan sekerja (teamwork) dalam menjalankan pembaikan kerja.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Kami adalah digalakkan untuk bekerja dengan pegawai dan kakitangan di Jabatan lain bagi menyelesaikan masalah.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Bekerja dengan rakan sekerja saya adalah sangat baik dan saling mempercayai.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sangat tidak setuju</td>
<td>Tidak setuju</td>
<td>Tidak Pasti</td>
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<td>---</td>
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</tr>
<tr>
<td>39. Bila sesuatu tindakan menjadi salah, kami lebih mengkaji cara kami menjalankan pembaiakan daripada menyalahkan orang lain.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Saya memiliki pengetahuan dan kemahiran bagi menayakan pembaiakan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Maklumat yang berhubungkait dengan skop kerja mudah diperolehi dan dicapai.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>42. Saya mendapati pembaiakan kerja ini satu pembaharuan.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>43. Saya mempunyai naluri yang baik terhadap pembaiakan kerja ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Saya mengalami pembaiakan kerja ini sebagai proses yang positif.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Saya bersedia untuk memberi sambangan yang signifikasi/menonjol dalam pembaiakan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Saya ingin memberi komitmen sepenuhnya dalam proses pembaiakan kerja ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Saya bersedia menyumbang tenaga saya dalam proses pembaiakan ini.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(Sila tanda kenyataan yang awda Setuju atau Tidak bagi menyukat faktor Mempengaruhi dan Perlu dalam meningkatkan kesediaan awda)

<table>
<thead>
<tr>
<th></th>
<th>Sangat tidak bersetuju</th>
<th>Tidak setuju</th>
<th>Tidak Pasti</th>
<th>Setuju</th>
<th>Sangat setuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 Kebanyakan pembaikan yang sepatutnya menyelesaikan masalah akan mendatangkan satu impak.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Secara menyeluruh, cadangan pembaikan kerja adalah untuk kebaikan.</td>
<td></td>
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<tr>
<td>50. Kerja pembaikan akan meningkatkan perasaan pencapaian saya.</td>
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</tr>
<tr>
<td>51. Ketua saya mempercayai kemampuan saya untuk melaksanakan kerja pembaikan dengan baik.</td>
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<tr>
<td>52. Ketua saya mempercayai kemampuan, penilaian dan keputusan saya dalam melaksanakan pembaikan kerja.</td>
<td></td>
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<tr>
<td>53. Ketua saya menghargai dan mengiktiraf sumbangan saya kepada pembaikan kerja ini.</td>
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</table>
BAHAGIAN II: KOMEN TAMBAHAN BAGI MENINGKATKAN KAJISELIDIK.

Adalah di galakkan jika awda dapat menyumbang sebarang komen tambahan bagi meningkatkan kualiti kaji selidik.

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Terimakasih atas penyertaan awda.
APPENDIX 8 – PEARSON-PRODUCT MOMENT CORRELATION BETWEEN CLIMATIC FACTORS AND EMPLOYEES’ READINESS MULTIDIMENSIONALLY

Table showing Pearson-product moment correlation between itemised influential climatic factors with itemised multidimensional readiness of employees.

<table>
<thead>
<tr>
<th>Sub-scale</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy 1 (Cronbach’s alpha: 0.92)</td>
<td>0.426**</td>
<td>0.494**</td>
<td>0.475**</td>
<td>0.472**</td>
<td>0.501**</td>
<td>0.473**</td>
<td>0.445**</td>
<td>0.401**</td>
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</tr>
<tr>
<td>Efficacy 2</td>
<td>0.442**</td>
<td>0.514**</td>
<td>0.469**</td>
<td>0.512**</td>
<td>0.487**</td>
<td>0.510**</td>
<td>0.435**</td>
<td>0.363**</td>
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</tr>
<tr>
<td>Efficacy 3</td>
<td>0.442**</td>
<td>0.440**</td>
<td>0.428**</td>
<td>0.483**</td>
<td>0.496**</td>
<td>0.463**</td>
<td>0.427**</td>
<td>0.353**</td>
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</tr>
<tr>
<td>Efficacy 4</td>
<td>0.434**</td>
<td>0.568**</td>
<td>0.535**</td>
<td>0.486**</td>
<td>0.506**</td>
<td>0.523**</td>
<td>0.450**</td>
<td>0.451**</td>
<td></td>
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</tr>
<tr>
<td>Efficacy 5</td>
<td>0.509**</td>
<td>0.587**</td>
<td>0.541**</td>
<td>0.531**</td>
<td>0.560**</td>
<td>0.577**</td>
<td>0.465**</td>
<td>0.486**</td>
<td></td>
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</tr>
<tr>
<td>Group efficacy 1</td>
<td>0.492**</td>
<td>0.548**</td>
<td>0.499**</td>
<td>0.525**</td>
<td>0.511**</td>
<td>0.523**</td>
<td>0.454**</td>
<td>0.453**</td>
<td></td>
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</tr>
<tr>
<td>Group efficacy 2</td>
<td>0.464**</td>
<td>0.524**</td>
<td>0.476**</td>
<td>0.504**</td>
<td>0.491**</td>
<td>0.519**</td>
<td>0.457**</td>
<td>0.401**</td>
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</tr>
<tr>
<td>Group efficacy 3</td>
<td>0.488**</td>
<td>0.494**</td>
<td>0.446**</td>
<td>0.475**</td>
<td>0.469**</td>
<td>0.453**</td>
<td>0.462**</td>
<td>0.390**</td>
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<tr>
<td>Group efficacy 4</td>
<td>0.469**</td>
<td>0.531**</td>
<td>0.524**</td>
<td>0.553**</td>
<td>0.564**</td>
<td>0.547**</td>
<td>0.446**</td>
<td>0.470**</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Group efficacy 5</td>
<td>0.640**</td>
<td>0.629**</td>
<td>0.555**</td>
<td>0.592**</td>
<td>0.575**</td>
<td>0.581**</td>
<td>0.566**</td>
<td>0.427**</td>
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</tbody>
</table>

Information that relates to the scope of work is readily available and accessible

<table>
<thead>
<tr>
<th>Organisational trust (Scale) (Cronbach’s alpha: 0.872)</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in top management (Cronbach’s alpha: 0.872)</td>
<td>0.376**</td>
<td>0.363**</td>
<td>0.378**</td>
</tr>
<tr>
<td>Trust in top management fulfill its promises</td>
<td>0.352**</td>
<td>0.328**</td>
<td>0.347**</td>
</tr>
<tr>
<td>Trust in top management consistently implements its policies in the Department</td>
<td>0.347**</td>
<td>0.346**</td>
<td>0.371**</td>
</tr>
<tr>
<td>Trust in top management to be fair, honest, sincere and unbiased in their decision making and action</td>
<td>0.387**</td>
<td>0.355**</td>
<td>0.404**</td>
</tr>
<tr>
<td>The two way communication between the top manager and the subordinates is very good</td>
<td>0.447**</td>
<td>0.450**</td>
<td>0.485**</td>
</tr>
<tr>
<td>The objectives of the improvement can be put in practice</td>
<td>0.403**</td>
<td>0.370**</td>
<td>0.373**</td>
</tr>
<tr>
<td>There is good communication between management team and staff members concerning the organisation’s policy or plans towards improvement</td>
<td>0.456**</td>
<td>0.478**</td>
<td>0.372**</td>
</tr>
<tr>
<td>Top management support</td>
<td>0.456**</td>
<td>0.478**</td>
<td>0.372**</td>
</tr>
<tr>
<td>Top and senior management provide sufficient attention to the personal consequences that the improvement could have for their staff members</td>
<td>0.456**</td>
<td>0.478**</td>
<td>0.372**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisational trust (Scale) (Cronbach’s alpha: 0.897)</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management trust in peers (Cronbach’s alpha: 0.897)</td>
<td>0.496**</td>
<td>0.555**</td>
<td>0.618**</td>
</tr>
<tr>
<td>Top management trust me to do the job well</td>
<td>0.479**</td>
<td>0.585**</td>
<td>0.608**</td>
</tr>
<tr>
<td>Top management trust my competency, judgement and decision making when implementing the improvement</td>
<td>0.478**</td>
<td>0.501**</td>
<td>0.524**</td>
</tr>
<tr>
<td>The top and senior management appreciates and recognised my contribution to the improvement</td>
<td>0.560**</td>
<td>0.568**</td>
<td>0.633**</td>
</tr>
<tr>
<td>The improvements will increase my feelings of accomplishment</td>
<td>0.528**</td>
<td>0.519**</td>
<td>0.523**</td>
</tr>
<tr>
<td>Trust in peers</td>
<td>0.528**</td>
<td>0.519**</td>
<td>0.523**</td>
</tr>
</tbody>
</table>

(When something goes wrong, we look at the way we do our work rather than blaming others)
Clear expectation and Direction 2
(My top and senior management informs me of their expectation and clearly provides direction when necessary in implementing an improvement)

Factor 4: Top management support and participation (Scale) (Cronbach’s alpha:0.834)
Sub-scale:
Participation3 0.431** 0.453** 0.478** 0.476** 0.462** 0.477**
(Frontline staff and operational staff can raise issues for discussion)
Participation4 0.427** 0.432** 0.443** 0.418** 0.462** 0.423**
(Work problems and ideas are openly discussed)
Participation5 0.418** 0.426** 0.440** 0.442** 0.460** 0.425**
(It is possible to talk about outdated regulation and ways of working)
Top management support 1 0.413** 0.418** 0.441** 0.463** 0.465** 0.448**
(The management supports the improvement process unconditionally (legislative and system support, technical, personal and administrative support and financially).

** Correlation is at the 0.001 level (2-tailed)
All correlations are significant, Significant.= 0.000 (<0.001) Total respondents, N = 665

Table showing Pearson-product moment correlation between itemised essential climatic factors with itemised multidimensional readiness of employees.

<table>
<thead>
<tr>
<th>Factor 1: Communication (Scale) (Cronbach’s alpha: 0.78)</th>
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<th>Readiness 3</th>
<th>Readiness 1</th>
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<th>Readiness 1</th>
<th>Readiness 2</th>
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<tbody>
<tr>
<td>Itemised statements (sub-scale):</td>
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<tr>
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<td>0.307**</td>
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<td>0.404**</td>
<td>0.420**</td>
<td>0.420**</td>
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<td>0.313**</td>
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<tr>
<td>(The two way communication between the top manager and the subordinates is very good)</td>
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<tr>
<td>Communication 2</td>
<td>0.407**</td>
<td>0.416**</td>
<td>0.423**</td>
<td>0.472**</td>
<td>0.472**</td>
<td>0.410**</td>
<td>0.370**</td>
<td>0.341**</td>
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<tr>
<td>(I am regularly informed about how the improvement is going)</td>
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<tr>
<td>Communication 3</td>
<td>0.447**</td>
<td>0.450**</td>
<td>0.485**</td>
<td>0.504**</td>
<td>0.455**</td>
<td>0.439**</td>
<td>0.401**</td>
<td>0.365**</td>
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<tr>
<td>(It is clear how the objectives of the improvement can be put in practice)</td>
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<tr>
<td>Communication 4</td>
<td>0.393**</td>
<td>0.370**</td>
<td>0.373**</td>
<td>0.423**</td>
<td>0.423**</td>
<td>0.411**</td>
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<td>0.318**</td>
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<tr>
<td>(There is good communication between management team and staff members concerning the organisation’s policy and plans towards improvement)</td>
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<tr>
<td>Communication 5</td>
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<td>0.265**</td>
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<tr>
<td>(Information concerning the improvement does not reach us)</td>
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<td>Communication 6</td>
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<tr>
<td>(We are sufficiently informed of the progress of improvement)</td>
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<table>
<thead>
<tr>
<th>Factor 2: Participation (Scale) (Cronbach’s alpha: 0.858)</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
<th>Readiness 1</th>
<th>Readiness 2</th>
<th>Readiness 3</th>
<th>Readiness 1</th>
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<th>Readiness 1</th>
<th>Readiness 2</th>
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<tbody>
<tr>
<td>Itemised statements (sub-scale):</td>
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<tr>
<td>Participation 1</td>
<td>0.454**</td>
<td>0.441**</td>
<td>0.457**</td>
<td>0.481**</td>
<td>0.477**</td>
<td>0.455**</td>
<td>0.397**</td>
<td>0.391**</td>
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<tr>
<td>(Improvement are always discussed with the staff concerned)</td>
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<tr>
<td>Participation 2</td>
<td>0.440**</td>
<td>0.428**</td>
<td>0.459**</td>
<td>0.483**</td>
<td>0.457**</td>
<td>0.452**</td>
<td>0.434**</td>
<td>0.345**</td>
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<tr>
<td>(Decision concerning improvements are consulted with affected staff members)</td>
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<tr>
<td>Participation 3</td>
<td>0.431**</td>
<td>0.453**</td>
<td>0.478**</td>
<td>0.476**</td>
<td>0.461**</td>
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<tr>
<td>(Frontlines staff and operational staff can raise issues for discussion)</td>
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<tr>
<td>Participation 4</td>
<td>0.427**</td>
<td>0.432**</td>
<td>0.443**</td>
<td>0.418**</td>
<td>0.462**</td>
<td>0.423**</td>
<td>0.401**</td>
<td>0.477**</td>
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<tr>
<td>(Work problems and ideas are openly discussed)</td>
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</tr>
<tr>
<td>Participation 5</td>
<td>0.418**</td>
<td>0.426**</td>
<td>0.440**</td>
<td>0.442**</td>
<td>0.460**</td>
<td>0.425**</td>
<td>0.375**</td>
<td>0.394**</td>
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<tr>
<td>(It is possible to talk about outdated regulation and ways of working)</td>
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</tbody>
</table>
Factor 3: Clear task roles and responsibilities (Cronbach’s alpha:0.855)

<table>
<thead>
<tr>
<th>Itemised statements (sub-scale):</th>
<th>0.546** 0.525** 0.542** 0.532** 0.525** 0.548** 0.469** 0.460**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities 1 (I know what is expected of me at work)</td>
<td>Clear task roles and</td>
</tr>
<tr>
<td>Clear task roles and</td>
<td>0.483** 0.544** 0.538** 0.540** 0.527** 0.532** 0.459** 0.453**</td>
</tr>
<tr>
<td>Responsibilities 2 (My task role and responsibility at work is clearly explained)</td>
<td>Clear task roles and</td>
</tr>
<tr>
<td>Clear task roles and</td>
<td>0.496** 0.557** 0.568** 0.594** 0.584** 0.613** 0.478** 0.471**</td>
</tr>
<tr>
<td>Responsibilities 3 (My commitment comes from knowing my task role and responsibility)</td>
<td></td>
</tr>
</tbody>
</table>

Factor 4: Top management's trust in subordinates (Cronbach’ alpha:0.902)

<table>
<thead>
<tr>
<th>Itemised statements (sub-scale):</th>
<th>0.496** 0.555** 0.618** 0.560** 0.543** 0.560** 0.459** 0.478**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management’s trust in</td>
<td></td>
</tr>
<tr>
<td>Subordinates 1 (My top manager trust me to do the job well)</td>
<td>Top management’s trust in</td>
</tr>
<tr>
<td>Top management’s trust in</td>
<td>0.479** 0.585** 0.608** 0.584** 0.568** 0.573** 0.506** 0.505**</td>
</tr>
<tr>
<td>Subordinates 2 (My top manager trust my competency, judgement and decision making when implementing the improvement)</td>
<td>Top management’s trust in</td>
</tr>
<tr>
<td>Top management’s trust in</td>
<td>0.478** 0.501** 0.524** 0.482** 0.494** 0.499** 0.442** 0.451**</td>
</tr>
<tr>
<td>Subordinates 3 (My top and senior management appreciates and recognized my contribution to the improvement)</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is at the 0.001 level (2-tailed)

All correlations are significant, Significant.= 0.000 (<0.001) Total respondents, N = 665