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THE SERVITIZATION OF THE IT FUNCTION: IMPLICATIONS FOR THE IT PROFESSIONAL

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Abstract

This development paper notes that IT work has been increasingly subjected to processes associated with ‘servitization’ through managerial frameworks that espouse working practices managed according to principles of scientific rationalisation (specifically but not exclusively, ITIL). This has been (re-)shaping the experience of working as an IT technical professional, and thereby has implications for professional identity. In the following short paper, some of the literature in relation to this matter is discussed (as the basis for a future research project). This paper suggests how managerialism is embedded within the IT servitization discourse and this has implications for de-skilling and loss of professional autonomy.

Keywords: IT Service Management, IT Profession, IT Servitization, Identity, Job Quality.

1.0 The Servitization of the IT Function

When computing or information technology started to arrive in organizations, there was understandably a primary focus on the technical design and development of systems, and management thinking was consequently geared towards the delivery of working systems. As such managers were typically technical-professionals themselves who worked alongside other technical-professionals to achieve clear delivery objectives (Winniford et al., 2009). Alongside this focus within organizations, an academic literature sprung up that focused on how such IT developers and programmers worked and were managed (e.g. Kraft, 1977). Subsequent to that, what has been published in the academic literature has combined to leave an impression that IT professional work is somewhat synonymous with the IT programming or IT development work that is performed before IT systems are handed over to users to use (e.g. Marks and Scholarios, 2007; Bergvall-Kåreborn and Howcroft, 2013).

In those early days of IT programming work, the computer languages available for use (e.g COBOL) necessitated IT professionals having a high degree of autonomy and independence as they worked to write and then compile, debug and test their code over a long period of time (dependent upon the specification). While to some extent this remains the case with
programming tasks today, the computer languages available to programmers have become easier to work with: they typically provide them with a friendlier interface and problem-solving feedback, and compilation and testing are more straightforward tasks to be performed. However, from the worker’s perspective this ‘speeding up’ of the programming task, has afforded managers greater scope for closer surveillance of the labour process such that Suddaby et al (2017, p. 290) have recently remarked on how the modern computer programmer is ‘as subject to the same deskilling impacts of scientific management as is the typical assembly line worker’.

However, this continual focus on programmers as representative of the IT profession fails to recognize that as IT systems have become ubiquitous (Greenhill, 2011) there has been a wholesale shift in organizations’ foci from development of IT systems to maintenance and support of ‘live’ IT systems. As this shift has occurred so the language of IT systems as IT services has become institutionalised. As a term in the academic literature, ‘servitizing IT’ was first explicitly referred to by Conger as late as 2010 and there has been a trickle of literature that acknowledges this service turn over the last decade (e.g Iden and Eikebrokk, 2013; Cater-Steel, 2009). However, in the abundant practitioner literature the refocus on IT as ‘services’ harks back to an earlier period, most notably to the introduction of the IT Infrastructure Library (ITIL) publications of the UK Government in the late 1980’s (e.g. Iden and Langeland, 2010; Bartlett et al., 2001; Stroud, 2011; Steinberg, 2011). This practitioner discourse has led to the introduction and use of various ‘best practices’ for managing IT systems as ‘services’, with ITIL remaining the leading framework globally (Rae, 2017), adopted by iconic organizations such as IBM and NASA (So and Bolloju, 2005; ITIL news, undated) and newly-dominant IT service providers such as TCS Computer Services (2017) and Wipro (2017)

Under ‘best practices’ such as ITIL, ISO/IEC 20000, DevOps, and COBIT, the management of IT systems is systematised such that (theoretically) clearly defined processes detail every aspect of ensuring that business needs are served by the IT infrastructure employed. ITIL, as the ‘gold standard’ framework for IT managers (Dorfman, 2008; Rae, 2017) borrows heavily from the canon of neo-Taylorist techniques promoted by business schools, notably, ‘Lean’ (George, 2003), ‘Total Quality Management’ (Feigenbaum, 1986), and ‘Service Level Management’ (Sturm et al., 2000), and adheres to Levitt’s (1972) call for the management techniques of production management to be applied to the management of non-tangible
services. In doing so, there has been a shift in management concerns (and required skills sets) from the technical to the managerial, implicitly infecting technical professional values with antipathetic commercial values (Faulconbridge and Muzio, 2008). This impact on the IT professional is discussed in the next section.

2.0 The Servitization of the IT Professional

Under servitized arrangements, the typical IT professional is likely to be found working within a defined process to maintain and support a live IT system. A typical process is the Incident Management process in which the IT professional will work on one task after another, responding to reports of IT issues (e.g. a laptop crash) or fulfilling ‘service requests’ (e.g. to have access to a particular application). Other processes include Change Management, Problem Management, Availability Management, etc. (Trusson, 2013). Working within these management-defined processes, the IT professionals’ autonomy to act with agency is inevitably somewhat restricted and their work subject to close electronic supervision. As such IT professional work becomes work where close managerial surveillance and control is normalised; i.e. work that is less like ‘professional’ work and more like ‘info-service work’ (Russell, 2009) such as that performed in call centres. In this new servitized IT professional work, high level technical skills are still typically required, although perhaps to a lesser extent than in the past (Hawk et al., 2012), but there is also a greater emphasis on customer service skills. Management present the Service Level Agreement (SLA) is central to the work performance. Although the IT professionals typically have no say in what their managers agree to provide to the customer business (e.g. turnaround times for resolving incidents), the SLA becomes the marker by which their performance will be judged, with the customer business positioned as ‘sovereign’ over them (Korczynski, 2002) and technologies employed to standardize and then monitor their performance against the SLA (Turban et al., 2001). As such the SLA is used to assert control over IT professionals as they go about their technical work. Indeed, these IT professionals are commodified within the processes they work within In this way their productivity becomes measurable ‘in units of cost, time and effort’ (Cannon, 2011, p.382) and their technical capabilities become redefined as corporate ‘knowledge assets [to] be highly leveraged’ (Rance, 2011, p.67).
Through this objectification of the workforce, strategic decisions to ‘outsource’ and ‘offshore’ organizational IT work has become more rationally defensible for senior managers keen to follow financialization strategies to win short-term share price value by reducing the direct wage bill and exploit ‘national differences of wages’ (Standing, 2011; Davis, 2009; Marx, [1867], 2009).

Thus, we must consider whether IT professionals working under servitization techniques retain those traits of professionalism that they had when their professional status was established in the academic literature previously (Evetts, 2003). We might consider that their work remains such that they often must use superior technical expertise to diagnose the situation rapidly, and then respond rapidly, and often creatively, using professional inference, and that this expertise is founded upon learned theoretical knowledge (Johnson, 1972; Larson, 1977; Abbot, 1988; Broadbent et al, 1997; Cohen et al, 2005; Fincham, 2006). We might also note that they continue to be trusted to solve the problems that organizations need solving in order to operate (Starr, 1982; Muzio et al, 2013), and as such, as a body of workers in an age in which organizations are reliant upon IT systems, are socially significant (Brock et al, 2014)

So, while the image of the IT profession being one of prestige, perhaps most notably presented in Barley and Kunda’s (2004) ethnographic study of IT contractors may not reflect the modern-day work of the ‘servitized’ IT professional, it might still be regarded as a work domain of status and worthy of recognition as valuable. However, the managerialism that is explicit in the IT service management practitioner literature must be seen as a threat to this status. Management-defined processes that impose management-selected ICTs that monitor performance and constrain what IT professionals can or cannot do will have implicitly undermined the IT professional’s autonomy to act according to their technical judgment, for example by demanding they do not engage in work that might get to the bottom of a technical issue but rather resolve issues quickly in the expectation that similar issues will recur.

3.0 Developing the Research

A key reason for bringing this development paper to UKAIS is to have the opportunity to discuss how the issues raised by this paper might be subjected to empirical research. For my
PhD research (completed in 2013 under the supervision of Neil Doherty), that conceptualised the IT service support worker, I conducted qualitative research across five case study IT functions that had been subjected to servitization via implementation of ITIL managerial practices. This entailed collecting and analysing observation and interview data. While some of this data will be pertinent to this research, the positioning of this research argues that an historical shift has taken place within the IT profession, affecting job quality and professional identity, that has not been adequately acknowledged in the literature, and for which I have only limited data to support. I would welcome the opportunity to discuss how historical and contemporary perspectives might be addressed through data collection and analysis. For example, might identifying and then interviewing IT professionals who have witnessed changes associated with the servitization agenda be a fruitful line of enquiry? I am sure that the UKAIS community would be helpful to me at this developmental stage.

References


Bartlett, J, Hinley, D, Johnson, B, Johnson, D, Keeling, C, Lloyd, V, MacDonald, I, Mather, J, McLaughlin, G, Rudd, C, Wheeldon, D and Young, R (2001), Service Delivery, Norwich: TSO.


