THE SERVITIZATION OF THE IT FUNCTION: IMPLICATIONS FOR THE IT PROFESSIONAL (Development Paper)

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

In the early stages of the development of organizationally-situated computer/IT work, the focus of the work was primarily on the technological design and development of IT systems. Management of such work was typically technology-oriented (Winniford et al., 2009) and practiced by experienced technical professionals. Relatedly, the academic literature that has developed on the practices of the IT profession has mainly focused upon IT developers/programmers (e.g. Marks and Scholarios, 2007; Bergvall-Kåreborn and Howcroft, 2013) whose work is primarily performed before IT systems 'go live' to be used by other workers. Traditionally, the IT professional employed as a developer/programmer was required to follow the rules of the coding language(s) being used but otherwise was typically and necessarily able to work independently until they completed the programming task. To a large extent this remains the case: the programming task is still typically performed over an extended period, and as such programmers have a need to be afforded a high degree of autonomy. However, as programming languages have become easier to master with greater inscribed support for problem solving within the coding task (e.g. quicker compilation and more helpful feedback from compilation), there has opened up a greater opportunity for managerial surveillance of the programming labour process, with Suddaby et al (2017, p.290)

recently asserting that 'the average… computer programmer is as subject to the same deskilling impacts of scientific management as is the typical assembly line worker'.

As IT systems have established themselves as being ubiquitous across organisations of all sizes, such that they are 'an intrinsic part of… business practices and government activities and service provision' (Greenhill, 2011, p.v), so most organisations have shifted their primary concern from systems development (the domain of programmers) to the maintenance and support of the 'live' IT services they rely upon to trade/function. The term 'servitizing IT' was coined in the academic literature by Conger (2010) to denote this trend towards emphasising customer-oriented service in the delivery of business IT solutions. The nascent and still scant academic literature on organisational IT provision following this 'service turn' (Iden and Eikebrokk, 2013) essentially responds to ideas that had already taken hold amongst an IT service management (ITSM) practitioner community, having been diffused via discursive practice and practitioner literature (e.g. Bartlett et al., 2001; Stroud, 2011). Of particular importance in this regard are the techniques described in the ITIL (formerly, Information Technology Infrastructure Library) 'best practice' literature (e.g. Bartlett et al., 2001; Steinberg, 2011), which remains the predominant framework for ITSM (Rae, 2017). ITIL has evolved from being a set of IT management guidelines for UK civil servants in the late 1980s to being an internationally-diffused managerial model for conceiving IT systems as services and managing them accordingly (Iden and Langeland, 2010). Specifically, under ITIL, IT functions are reconfigured to prioritize managerial concerns, and in doing so implicitly contaminate the professional values of IT technicians with those managerial concerns (Faulconbridge and Muzio, 2008).

While there are alternative models of ITSM 'best practice' (e.g. DevOps and COBIT), ITIL dominates as the global 'gold standard' framework for IT managers to use (Dorfman, 2008; Rae, 2017) and carries endorsements across the technology business landscape: from iconic US organizations such as IBM and NASA (So and Bolloju, 2005; ITIL news, undated) to the leading Indian IT service providing companies such as TCS Computer Services (2017) and Wipro (2017). In part the rise to prominence of ITIL, and its related international standard of ISO/IEC 20000 (van Bon et al, 2008), responds to the increasing complexity of organizational IT systems (Pollard and Cater-Steel, 2009). And in part it reflects contemporary neo-Taylorist management approaches, including 'Total Quality Management' (e.g. Feigenbaum, 1986) and 'Lean' (e.g. George, 2003), applying them to the provision of IT services (Levitt, 1972; Conger, 2010). Management control is asserted via the

implementation of multiple rationalised and standardised processes that interact within a system designed to fulfil defined customer needs (Steinberg, 2011).

2.0   The Servitization of the IT Professional

In contrast to the IT professional in the traditional IT function, the IT professional employed in the servitized IT function to maintain and support live systems is more likely to be working on a succession of monitored tasks during each working day, working within management-defined and imposed processes (notably: Incident Management; Change Management and Problem Management) (Trusson, 2013). As such, they are more prone to managerial surveillance and control. As with other workers who work in such a way (i.e. taking a task from a queue, completing it and moving on to the next task), ICTs might usefully be employed to assert such control. Within this new servitized working environment the IT professional is expected to take on the role of servant to the defined 'customer' who is mythically assigned sovereignty over the IT professional (Korczynski, 2002) within the rational framework. This customer:servant relationship is presented to workers as being sacrosanct within a creedal service level agreement (SLA) that is negotiated and agreed at a rational business-to-business level between the management of the service provider and the management of the service recipient. The SLA, as a feature of rationalized service level management (Sturm et al., 2000), sets out the performance levels to be met by the employees of the service provider (i.e. here the IT service professionals) and is thereby central to the servitization of the IT function. It determines the worker performance data that ICTs need to capture so that IT service managers can provide an assurance that agreed service levels are being met. As such it is a mechanism for asserting greater pressure/control over the IT professionals who are tasked with providing the 'expert' service for the service provider.

ITIL promotes the commodification of IT professionals as 'people assets', such that their 'productive capacity' might be measured 'in units of cost, time and effort' (Cannon, 2011, p.382). Similarly, it commodifies the capabilities of IT professionals as 'knowledge assets', defined as 'accumulations of awareness, experience, information, insight and intellectual property' such that they 'can be highly leveraged' (Rance, 2011, p.67). It is this commodification that has facilitated the 'outsourcing' and 'offshoring' of corporate IT work. For large Western companies, this work has often gone to specialist IT service providers in

India (Standing, 2011), with the objective being to create greater shareholder value (Davis, 2009), often by exploiting 'national differences of wages' (Marx, [1867], 2009). The ITIL framework also advocates the management imposition of role-specific and process-related integrated applications software. This software is designed to support the servitization of the IT function by standardising the '[performance of] specific tasks and information processing activities' (Turban et al., 2001, p. 129).

Significantly, the academic literature has yet to adequately explore the effects upon the nature of IT professional practice resulting from IT servitization. Any acknowledgement of the nature of IT professional work having changed through the diffusion of ITSM 'best practices' is only implicitly acknowledged (e.g. Cater-Steel, 2009) but not discussed to any great extent. Despite the widespread servitization of IT functions, organizations remain reliant on the technical skills of IT professionals albeit that that there may be a lesser expectation of skills competency today than in previous eras (Hawk et al., 2012). While technical information systems work has long been attributed professional status (Evetts, 2003), by adopting a trait-based perspective on professions (Muzio et al, 2013), IT service professionals (conceived of as those workers who develop and support ICTs used by others) retain multiple traits associated with organizationally-situated professional workers. Firstly, their work is socially significant (Brock et al, 2014). Secondly, they are required to exercise 'superior' technological expertise (Larson, 1977, p.185) underpinned by a body of theoretical knowledge (Fincham, 2006). Thirdly, they exercise an 'ability to grasp new events quickly and to respond effectively' (Broadbent et al, 1997, p.51) using professional inference (Abbot, 1988) or creativity (Cohen et al, 2005). Fourthly, their technical expertise affords them both diagnostic authority (Johnson, 1972) and the trust and obedience of those who benefit from their expertise (Starr, 1982). And fifthly, they '[solve] core problems for their employers' (Muzio et al, 2013, p.710).

However, in opposition to these traits attributing professional status to IT workers, the shift towards a servitized IT function, points in the opposite direction towards IT work becoming more akin to 'info-service work' (Russell, 2009). Whereas the academic literature has tended towards painting a picture of IT work as a prestigious domain of experts, most notably in Barley and Kunda's (2004) classic ethnography of 'gurus' and 'hired guns', this may not reflect the experience of most IT professionals following IT servitization. The work might perhaps more usefully be presented as one of commodified labour practicing within management-defined work processes that entail the mandatory use of management-imposed ICTs.

3.0   Concluding Comment: The Complicity of the IT Profession in the Servitization of the IT Professional

ITIL, as a mechanism of IT servitization within an organization, is enthusiastically promoted by the UK's leading IT professional body, 'BCS, the Chartered Institute for IT' (formerly the British Computer Society, and hereafter BCS). By implicitly accommodating the managerialist values inscribed within ITIL, the BCS opens itself up to accusations of complicity in degrading the quality of jobs within the IT profession.   There is a clear suggestion of self-alienation (Blauner, 1964) and/or self-exploitation in advocating the commodification of IT professionals within the systems model and the imposition of ICT artefacts (produced by other IT professionals) upon them to facilitate 'commercial business growth' (BCS, 2009). The overriding proposition here is that the shift towards the servitization of organizational IT functions has had a significant influence upon the IT professional discourse. It has brought to the fore a managerial logic that has overlapped with, and to some extent usurped, the technical-professional logic that was foundational to the IT profession (Olakivi and Niska, 2016).

4.0   Developing the Research

A key reason for bringing this development paper to UKAIS would be 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.

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