Digital work in a digitally challenged organization

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ABSTRACT

Digitally literate employees are accustomed to having free access to digital media technologies. However, some organizations enact information technology (IT) governance structures that explicitly proscribe access to these technologies, resulting in considerable tension between employees and the organization. We explore these tensions in an exploratory investigation into the Chinese operations of a global hotel chain. We examine how employees creatively act as bricoleurs as they violate IT policies to ensure access to the digital media of their choice. We discuss the broader implications of our findings for practicing managers, as well as future research opportunities, before concluding the paper.

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1. Introduction

In the past decade, we have seen the ascendance of digital organizations, transforming their infrastructure and processes by leveraging digital technologies in order to deliver high-quality digital services to employees and customers alike [7,56,66]. These newly digital organizations empower employees who are already digitally literate, engaging with digital technologies on a regular basis in their working lives [66]. However, not all digitally literate employees work in a digitally liberated environment. Instead, they may experience significant barriers that hinder their digital engagement. One key barrier, which is largely invisible to those unaffected by it, is the information technology (IT) governance structure that constitutes the organization's formal position toward technology. While some organizations have devised IT governance structures that appear to welcome digital technologies with open arms [7], others are more reticent [28] or even reactionary. As Arvidsson et al. [3] suggest, if organizations are mired in, yet blind to the existence of, a quag of outdated patterns of work and control, they are unlikely to realize how they can take advantage of available opportunities within the sociotechnical system. In these kinds of organizations, characterized by control-based information system (IS) legacy structures and inflexible cognitive schemes, there is heightened potential for tensions with the irreconcilable demands of a digitally literate workforce [10,66].

Prior research into the implementation of IT has largely focused on voluntary adoption by individuals in organizations [58], including the extent to which the technology supports specific work tasks [34,40]. This operational application of IT is mirrored by a focus on an IT strategy that is functionally aligned with but 'essentially subordinate to business strategy' [7]; cf. [36]. Consistent with Arvidsson et al. [3] and Zuboff [66], the context of many previous studies has involved organizations wedded to work routines that barely acknowledge the transformative potential of digital technologies. However, little research has been conducted into the tensions created when organizational IT policy proscribes digitally literate employees from adopting the social technologies that they need to work. In principle, these tensions can be resolved if organizations are prepared to dump their strategic blindness [3] and change their IT governance structures. In the absence of such change, digitally literate employees are likely to develop their own solutions, working around policies [2,27] by adaptively structuring whatever resources are available DeSanctis and Poole, 1995 in an environment rich in both social and technical opportunities [9,39], in the spirit of bricolage [46].

Prompted by the absence of literature in the interplay between digitally literate employees and conservative IT governance structures, our research question is: How do digitally literate employees cope with the tensions that arise when they work in an organization characterized by a conservative IT governance structure? One such digitally challenged organization is Dingle, a European hotel management company. Although Dingle's brand is positively recognized by travellers globally, it is a conservative organization in terms of the deployment of technology. For instance, email is the organizationally sanctioned tool for both

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internal and external communication. Access to social media applications is not permitted. All Internet traffic is routed via a proxy server that functions as a filter, blocking access to selected websites deemed inappropriate by the architects of the IT policy. Further, the Internet bandwidth provided to the hotel back offices, where employees' work is very limited, seldom exceeds 2 mbps. The conservativism is thus consistent with the strategic blindness to which Arvidsson et al. [3] refer.

There is an abundance of theoretical perspectives on how organizations can successfully 'go digital' (e.g., [50,56]). However, there is a lacuna of theory when it comes to explaining how employees cope with the tensions that result when organizations refuse to 'go digital'. Interpreting Zuboff [66], Burton-Jones [10] suggests that digitally literate employees may become more knowledgeable than their managers about the role of technology in organizational processes. This shift in knowledge also has the potential to shift power away from managers. Consequently, managers may feel vulnerable or threatened by this new technology and take steps to reinforce their authority by restricting digitally literate employees from accessing the technology's informating potential. However, even if employees are successfully barred from accessing the technology through legitimate, internal channels, they may simply work around corporate barriers and use illegitimate, external channels to ensure access to the technology [2,43].

New, bold theoretical perspectives are needed to enhance our understanding of these phenomena (cf. [35]). Several existing theories, notably sociotechnical theory (STT) and adaptive structuration theory (AST), are relevant to this endeavour, given that digitally literate employees must reconcile social and technical constraints and affordances in order to engage in an adaptive structuration of the system as they meet both social and workplace demands. In this study, we address both the theoretical gaps in the literature and the practical solutions that employees devise as they work around corporate obstructions to digital work.

Following this introduction, we succinctly review digital work, digital literacy and digital organizations, as well as the literature on organizational culture. Next, we develop a theoretical perspective to explain how digitally literate employees may encounter and cope with tensions present in the social (organizational) environment. Following a presentation of our research methods, we present a detailed case description, informed by the prior theoretical work, in which we highlight specific instances of tensions that we observed between the various digital actors. Following the case, we discuss the implications of our findings for research and practice and identify future research directions before concluding.

2. Literature review

2.1. Digital work and literacy

Digital work is a very broad term that covers a variety of technology-centric work practices. Fuchs and Sevignani ([30], p. 255) suggest that digital work requires organizing 'human experiences with the help of the human brain, digital media and speech in such a way that new products are created'. These new products vary widely in scope and include information in online repositories, new social relationships, services provided to customers and even new social systems. Engaging in digital work requires employees to be digitally literate. Eshet-Alkalai [25] developed a conceptual framework of digital literacy that encompassed multiple complementary skills. He further observed that 'Digital literacy involves more than the mere ability to use software or operate a digital device; it includes a large variety of complex cognitive, motor, sociological and emotional skills' (ibid.,

p.93). People who are digitally literate and perform digital work may work in a variety of organizational settings. The process of strategic digitization is inexorably, if slowly, continuing [7]. However, many organizations appear to be stuck in a predigital torpor. They fail to accept that the digital era has arrived, remain rooted in predigital organizational strategies and practices and consequently prioritize maintenance of the orthodoxy at any cost, thereby eliminating the possibility of digitally inspired change [3,10,66]. Although this predigital status quo may appear reactionary, it is a dominant organizational narrative. Shifting it requires paradigm change both among senior managers and among the community of researchers who study organizations.

2.2. Digital organizations and strategies

Since the turn of the century, the technical infrastructure of organizations has increasingly taken on a digital hue, even though the managerial thinking often has yet to catch up. There are increasingly more connections between people, products, processes, daily routines and services, all of which are immersed in digital technology to the extent that they are inseparable [7,50]. Further, digital technologies are increasingly embedded into products and services, which are very hard to 'disentangle . . . from their underlying IT infrastructures' [7]. Thus, a fundamental transformation of organizations is slowly taking place, with a complete overhaul of thinking about how business is done and value is created [23]. Even though strategic thinking in organizations may be mired in a predigital mindset, with IT relegated to playing a subordinate role, there is the opportunity for change, with IT contributing the strategic potential to lead organizations [7].

A new job title has been created for the senior executive charged with leveraging the digital opportunities in organizations: the chief digital officer (CDO), also known as the 'Transformer in Chief, given the need for transformation across the organization' [54]. Given the central role of digital technologies in digital organizations, the CDO must be actively involved in corporate strategic planning, exploring how digital technology can create value [62]. Much of this value creation will emanate from the cross-functional nature of digital technology applications, although new sociotechnical infrastructures cannot simply emerge ab initio; instead, they must 'wrestle with the inertia of the installed base' including the dominant silo-oriented thinking [15].

For instance, in the context of hotels, digital technologies may provide the opportunity to engage with guests through new social media channels, ensuring that they participate in a compelling experience, contributing content that drives future innovations. It is not just a matter of the hotel 'remembering' what kind of pillow guests like, but actively engaging with them on all aspects of the guest experience. This experience is cross-functional and will potentially incorporate aspects of marketing, customer service, logistics and operations. Further, the experience can also exist across hardware and software platforms: guests may prefer to interact via a personal computer (PC), tablet or mobile device and using email, instant messenger (e.g., Skype, WeChat, or Twitter) or other social media (e.g. Facebook, Kaixin, Weibo, Instagram, Tsu, or VK) [23].

However, a critical antecedent of these digital opportunities and the associated newly created value is the investment of both sufficient resources in a digital infrastructure [62] and the adoption of a new style of managerial thinking [3]. Only when both the digital mindset and the digital infrastructure are in place will the organization be competent to analyse the substantial data generated from customer transactions and leverage findings to create and manage new products and services. McKinsey's [8] research suggests that significant increases in customer