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# DIGITAL WORK IN A PRE-DIGITAL ORGANIZATIONAL CULTURE

*Research in Progress*

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## **Abstract**

*Digital natives constitute the majority of new employees entering the marketplace. However, they face an organizational corporate culture that enshrines the vested interests of a very different generation of people, whom they would characterize as digital immigrants or even dinosaurs. This organizational culture has very strict values and assumptions about the way people (should) work, resulting in considerable tension between the digital natives and their non-native colleagues. We explore these tensions in an exploratory case study of a hotel chain marked by its conservatism in IT policy. After reviewing the literature on digital natives, digital immigrants and organizational culture, we examine how digitally native hotel employees in China secure access to the digital media of their choice in the face of corporate obstruction. We discuss the broader implications of our findings for practicing managers, as well as future research opportunities, before concluding this research-in-progress paper.*

*Keywords: Digital Work, Digital Natives, Digital Immigrants, Organizational Culture.*

## **1 Introduction**

It might appear that digital work is ubiquitous, yet while digital work is certainly a very visible part of the digital lives that many of us lead, there are also significant barriers to digital work. In this paper, we explore a barrier that is largely invisible to those unaffected by it – the organizational culture. The formal context of this study is a European hotel management company (which we code-name ‘Dingle’), and in particular its operations in China. Although Dingle’s brand is positively recognised by travellers globally, it is a surprisingly conservative organisation as far as digital technology is concerned. This conservatism is most evident in certain tenets of the organizational culture, to which all employees are expected to adhere.

Our motivation in this paper is to investigate how digital native employees cope with an organizational culture developed by digital dinosaur executives at the corporate level and administered by digital immigrant managers in individual hotel properties. Gartner (Basso, 2008) recognises that “digital natives ... will drive significant change in ... technology, business processes and organizational structure”. From a theoretical perspective, prior research has largely focused on the voluntary adoption of information technology (IT) by individuals in organizations (Venkatesh et al., 2003) including the extent to which the technology fits specific work tasks (Goodhue & Thompson, 1995). However, the tension that is created when organizational policies prohibit the adoption of technologies that employees need to undertake work, specifically digital work, is under-investigated. This tension is important because if employees need yet do not have access to specific technologies, they may not be able to work effectively. Practically, tensions can be resolved with policy changes, though digital native employees also creatively find their own solutions to ensure their continued access to the technologies they need to complete their work (cf. Ferneley et al., 2006). Theoretically, new arguments that explain how employees work around corporate barriers to ensure that they do have access to the right technology are needed. Similarly, the notion of task-technology fit needs to be extended to include the specific characteristics of the technology user. In this study, we jointly address both the theoretical gaps in the literature and the ways in which employees work around corporate obstructions to digital work.

Following a succinct review of both the digital work phenomenon and its various actors, and the literature on organizational culture, we briefly present our research methods. We then embark on a case description in which we highlight specific instances of tensions that we observed between the various digital actors. Theoretically, our work is underpinned by adaptive structuration theory (DeSanctis & Poole, 1994) and the model of digital fluency (Wang et al., 2012). Following the case presentation, we discuss the implications of our findings for research and practice and seek to identify future research directions before concluding.

## **2. Background to Digital Work and Literature Review**

Digital work is a broad expression that covers a variety of technology-centric work practices. Definitions of digital work are numerous and there is insufficient space to review this literature here, but digital work essentially refers to any work that is undertaken with IT. Examples of such work are legion but include: information workers in the office with desk-top personal computers running MS Windows and Office applications; telecommuters and other mobile workers dependent on an array of devices that enable communication, collaboration and knowledge creation; and much in between. See Kaptelinin and Czerwinski (2007) for a review. Digital workers, very simply, are the people who perform digital work and so possess the requisite knowledge that enables them to perform on a continuum of digital fluency (Wang et al., 2012).

Wang et al. (2012), drawing on an extensive review of the literature, develop a high-level structural model of digital fluency, in addition categorising digital workers simplistically as digital natives and

digital immigrants. A third term, digital dinosaur, has also been proposed for people who have never caught up with the digital wave (Hurwitz, 2012). Wang et al. (2012) note that much of the prior research in this area has been conducted in the education sector with students or other young people. The Digital Fluency model suggests that a combination of demographic, organisational, psychological and social factors/characteristics influence both the opportunity to engage in digital work and the behavioural intention to do so. If that digital work occurs, then digital fluency in some degree may result. In their initial validation of the model, Wang et al. (2012) interviewed nine organisational employees to obtain preliminary evidence of the robustness of the constructs. Nevertheless, Wang et al. (2012) call for more extensive qualitative tests of their preliminary research model. The current paper represents such a test, focusing in particular on the way organisational culture influences how digital natives engage in digital work.

Digital natives are identified as being those people who were born during what we now call the digital age and grew up with technology. There is no hard date since when digital natives were born, as technology availability and use varies with both economic and personal circumstances. However, people who were born from 1984 onwards are more likely to have been exposed to Internet based technologies such as the World Wide Web as well as mobile phones from an early age (Jones and Czerniewicz, 2010). Digital natives “are often described as [people who are] digitally literate, highly connected, experiential, social, and in need of immediate gratification. ... [and] tend to be more comfortable with extensive peer-to-peer collaboration” (Vodanovich et al., 2010, p.712).

Digital immigrants, on the other hand, are people who were born before such technologies became widely available and thus learned how to use them in their teens or adult life (Wang et al., 2012). Digital immigrants could be the parents or grandparents of digital natives, assuming that they became reasonably familiar with digital technologies during their working lifetime. Zur and Zur (2011) adopt a more sensitive classification of digital natives and digital immigrants, suggesting that in each category some will be more enthusiastic than others. Thus, digital natives may be avoiders, minimalists or enthusiastic participants, while digital immigrants may be avoiders, reluctant adopters or enthusiastic adopters. Each sub-type can be characterised by different attitudes towards digital technology. Digital immigrants who are also avoiders are perhaps better characterised as digital dinosaurs, avoiding all contact with digital technology beyond a fixed-line phone number (Fielden and Malcolm, 2007).

All digital workers are constrained and empowered by the norms of the organizational culture within which they work. A huge diversity of research into organizational culture has been undertaken, far beyond what can be reviewed here. However, certain key findings in the organisational culture literature are germane to our research. Cui and Hu (2012) usefully classify organisational culture into five dimensions, two of which are particularly relevant in our context, viz.: shared values (e.g., Calori and Sarnin, 1991) and behavioural norms (e.g. Lepak et al. 2006). These echo Denison’s (1990) recognition that organizational effectiveness in part depends on a consistent or clearly defined culture. Kotter and Heskett (1992) also appreciated the link between performance and a strong culture that fits the organizational environment yet which is also open to change, enabling the organization to adapt to circumstances. In the IS discipline, organizational culture is also recognised as helping shape the success of IS-related outcomes, notably the way social groups interact with IT (Leidner and Kayworth, 2006). In short, the interplay between IT and organizational culture has the potential to exert significant impacts on organizational performance. However, translating these impacts at the level of the individual employee is challenging, since employees may not subscribe to the values and norms espoused by the architects of corporate policy. This situation is exacerbated in global firms that try to impose a single set of transnational norms on a multitude of local practices.

In the specific context of digital work, Vodanovich et al. (2010) note that there is a tendency for the more conservative organizations to attempt to block access to the digital media most favoured by digital natives. This decision appears to be motivated both by cultural norms, notwithstanding Kotter and Heskett’s (1992) suggestion that cultures need to adapt, and entirely legitimate security fears.

However, simply blocking access to specific digital media is likely to be both ineffective and counter-productive: it removes the opportunity to innovate and collaborate (Vodanovich et al., 2010). Telling digital native employees to use email is akin to telling a mechanised farmer to abandon his 21<sup>st</sup> century equipment and rake the fields by hand: “being connected is not only part of what digital natives do – it is who they are. They consider the digital world to be part of their personalities” (Vodanovich et al., 2010, p.720; cf. Schultze and Mason, 2012).

### **3. Methods**

The current, preliminary stage of the research was undertaken as an exploratory series of field investigations at hotel properties managed by the Dingle Group across China. It is important to emphasise that Dingle typically does not own the hotel properties, but provides hotel management services including technology solutions. Our unit of analysis is the individual employee who engages in digital work: we interviewed 86 employees in 16 hotel properties over a 14 month period. These employees ranged from General Manager through functional managers and clerical staff. The hotels were located in a variety of cities throughout China. The hotels themselves ranged from 2-star to 5-star. By studying a few digital workers in each location, we hoped to be in a position to compare the problems faced and solutions created by similar people in a wide range of circumstances. The interview protocols were informed by our interest in digital work and covered a wide range of topics including problem solving, digital communication, corporate culture & policy, and the solutions that employees devise as they deal with corporate policy. For reasons of space, we organise the case description and analysis below thematically. We focus on two specific contexts that involve digital work and explain how organisational circumstances influenced the opportunities that the different digital actors had to engage in digital work, their behavioural motivation to do so, and the outcomes.

## **4. Case Examples**

### **4.1 Digital Relationships**

We first explain how digital workers in Dingle leverage technology to create and maintain digital relationships with their colleagues. In the Chinese context, the relationships (referred to as *guanxi* in the Chinese language) that an individual employee has with other people are critical to the successful accomplishment of work. *Guanxi* involves close interpersonal relationships premised on mutual respect and obligations to help one another. *Guanxi* is ubiquitous in Chinese society (Fu et al., 2006), not least because there is a cultural propensity to distrust unknown others (Ou et al., 2007). Chinese employees routinely develop, maintain and leverage their *guanxi* with others during the course of their work (Yang, 1994). Thus, employees asserted that if they did not have *guanxi*, they would not be able to complete tasks that depended on the cooperation of other people. For hotel employees, such tasks are frequently encountered, especially among personnel responsible for marketing, sales and corporate communication. A purchasing manager in Shenzhen noted how he “leveraged his *guanxi* with suppliers to gain favourable prices and discounts” while a revenue manager in Shanghai commented that her *guanxi* with external experts in the fields of gifts, media and printing enabled her to complete work at a higher level of quality and more efficiently.

Traditionally, *guanxi* is developed and leveraged in face-to-face settings, often over a meal (Yang, 1994). However, today’s digital natives and immigrants neither enjoy the luxury of such face-to-face meetings nor really need them: *guanxi* is increasingly developed and leveraged online (Davison et al., 2013). The tools of choice are naturally digital, whether asynchronous (e.g. email) or synchronous (e.g. instant messengers). Digital natives in particular favour instantaneous communication through such applications as MSN/Skype, QQ, Weibo and WeChat. However, Dingle’s corporate culture explicitly prohibits use of social media applications for work: access is blocked. As a regional executive in China remarked: “There is no value in chatting. Web 2.0 applications have no role to

play in Dingle's corporate culture". From talking to Dingle's Global VP for IT, we learned that Dingle has a zero tolerance policy towards software applications that might breach security. Digital natives in Dingle rejected these restrictions and created solutions to ensure they could access digital media. Ironically, they did not resist the imposition of technology but the lack of technology (Wang et al., 2012). As a junior manager in Wuhan reported: "I need use QQ to contact external parties who refuse to use email ... or the telephone". The most common solution involved the network nominally reserved for hotel guests, which was usually accessible wirelessly throughout the hotel and which was not provided or controlled by Dingle. Although using this network violated Dingle's internal rules and corporate culture, employees insisted on their right to access the digital media of their choice in order to ensure that their work performance, at both individual and corporate levels, was effective. Further, their managers, digital natives or immigrants themselves, often agreed with them and turned a blind eye to this violation of corporate norms.

## **4.2 Digital Marketing**

Each Dingle hotel property has a marketing/communication manager (MCM). This person has the responsibility to market the hotel's facilities, e.g. meeting rooms, conference facilities, spa, and restaurants, to potential corporate customers. The MCM is thus an active communicator who needs access to high bandwidth Internet connections and also different kinds of digital communication tools in order to communicate effectively with corporate clients. MCMs may use email, but also rely on social media applications since their contacts are digital natives like themselves and they need to consider the communication preferences of their interlocutors. An MCM in Beijing used Weibo extensively to communicate with the hotel's previous and expected guests, offering them digital discounts on restaurant bookings. MCMs also need to upload graphical materials to internal or external websites in order to promote hotel facilities. However, Dingle's IT policies not only restrict access to social media applications, but also provide hotel back offices with very slow Internet connections and limit email attachment sizes to 2MB. Cloud-based storage facilities like DropBox are also blocked. An MCM in Guangzhou reported that: "A one minute task, like sending an email with attachments to corporate clients, can take two to four hours". Once again, the hotel's guest network comes to the rescue for many of these employees, since it has a much faster bandwidth – up to 1Gbps – and is readily accessible through wireless devices. Our interviews with the MCMs suggest a poor fit between corporate IT policy and digital employees' work requirements for IT. We discuss these findings in detail in the next section.

## **5. Discussion**

The case interviews evidenced the tensions between the strict organizational culture and the high demand for social media and Internet bandwidth; the direct consequence of these tensions are frustrated employees and ineffective work performance. Digital natives are well now entrenched in the global workforce and bring with them expectations for how they should live and work (Basso, 2008). Although these expectations are premised on their pre-work life, often driven by high levels of interactivity, communication and most importantly fun (Zur and Zur, 2011), their potential for multi-tasking and ability to synthesise multiple sources of information in innovative mashups should not be dismissed too quickly. Digital natives have much to offer to contemporary enterprises, if those enterprises can adapt their corporate cultures to accept the legitimacy of a new style of work. While some digital immigrants we interviewed accept the normative cultural strictures, digital natives are more likely to resist and indeed to find creative ways to secure access to their cherished digital social media applications. These digital rebels thus engage in a form of adaptive structuration (DeSanctis and Poole, 1994), adapting whatever tools they can access for their own needs in a form of technological bricolage. For digital natives, work and fun are not easily distinguished, as they may be for digital immigrants and even more so, digital dinosaurs. Although digital dinosaurs rule the roost in

many organisations, this will slowly change as they retire and disappear from the scene. Digital immigrants can be expected to be more sympathetic to the demands of digital natives for an appropriate toolbox of technologies that facilitate their work and thus covertly support their adaptive structuration behaviour.

None of the digital natives' demands should ride roughshod over an organisation's legitimate obligation to control its environment, especially in matters of security. In Dingle, the VP for IT made it very clear that security was his number one concern and the factor that prompted the decision to block access to a wide variety of social media applications deemed potentially dangerous. Some digital immigrant and native managers acknowledged that applications like QQ, although favoured for communication and file sharing, were also notorious for hosting malware and that the organization should shun them. The tensions created in this impasse between senior corporate management and junior local employees were considerable. Employees quickly realised that corporate policy was paradoxically immutable yet unenforceable, so they ignored it. The hotel's guest network provided digital natives and immigrants with the channel that they needed to access a variety of social media and file transfer resources, but it also protected the hotel from malware, since it was not possible to access corporate systems from this network. To some extent, therefore, the tensions were resolved, even if this meant violating corporate norms, but leading to positive outcomes on work performance.

There is already recognition in the management literature that corporate cultures need to be open to change. Strong pressure to change is coming from digital natives, who are now coming of age and are entering the workforce in large numbers. This presents an interesting research opportunity. Digital natives typically welcome new technology with open arms, unlike their predecessors. No longer should we assume user resistance to be the norm. As we saw here, users are more likely to resist the lack of technology, not its presence. Although we see the value of an adaptive structuration perspective, since employees are adapting existing tools in creative ways as they solve problems, we arguably need new theoretical perspectives to capture a new style of work that inimitably blends work and play. This new work cannot be addressed simply in terms of task-technology fit (Goodhue & Thompson, 1995). It must also incorporate the specific values of the digital workforce who insist on the right to use the technology of their choice, not management's discretion.

## **6. Future Research and Conclusions**

In this research-in-progress paper, we have reviewed the related literature on digital workers, corporate cultures and adaptive behaviour. We thematically organized our interviews into two major strands and discussed the corresponding findings. Future work will entail the development of formal theoretical propositions that outline the relationships among digital work requirements, corporate cultures, socio-technical tensions, adaptive behaviour and work performance. These theoretical propositions must be informed by both the literature and a more interpretive and intensive analysis of digital workers such as those we interviewed here. We expect these investigations to facilitate a more nuanced analysis about employee and corporate behaviour, producing a more precise picture of the interaction between digital natives, technology and work.

In conclusion, we find that digital natives have the potential to transform the workplace, much as digital media have transformed social interactions. Organisations must not consider how best to resist this transformative pressure, but rather how best to accommodate it and embed the creativity of digital natives into the workplace. Social media is no longer new nor even special. It is simply an extension of who we are.

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