European Journal of Information Systems

Taylor & Francis
Taylor & Francis Group

Instrumental Aspects of Play at Work in Information Systems Organisations

Journal:	*European Journal of Information Systems*
Manuscript ID	TJIS-2018-EN-0124.R4
Manuscript Type:	Ethnography/Narrative
Keywords:	Play, Workplace Play, IT Workplace, Ethnography, Critical Hermeneutics

Abstract:	Conventional wisdom suggests that play is the antithesis of work. But in the information technology (IT) industry, companies such as Google, Facebook and Microsoft have positively integrated play into the workplace. In an era when the digital is ubiquitous and where play with IT has become commonplace, exploring the nature of play at work could shed light on the broader question of how humans exist in the world. This is an essential question for contemporary Information Systems scholarship. Drawing on the critical hermeneutics of Hans-Georg Gadamer, I offer a narrative account of the instrumental aspects of play at work. I conducted an ethnographic study of the everyday practices of young IT professionals, revealing that workplace play has multiple instrumental aspects which are related to the temporality, spatiality, materiality and sociality of IT work practices.

Instrumental Aspects of Play at Work in Information Technology Organisations

Abstract

Conventional wisdom suggests that play is the antithesis of work. But in the information technology (IT) industry, companies such as Google, Facebook and Microsoft have positively integrated play into the workplace. In an era when the digital is ubiquitous and where play with IT has become commonplace, exploring the nature of play at work could shed light on the broader question of how humans exist in the world. This is an essential question for contemporary Information Systems scholarship. Drawing on the critical hermeneutics of Hans-Georg Gadamer, I offer a narrative account of the instrumental aspects of play at work. I conducted an ethnographic study of the everyday practices of young IT professionals, revealing that workplace play has multiple instrumental aspects which are related to the temporality, spatiality, materiality and sociality of IT work practices.

Keywords: Play, Play at work, IT Workplace, Ethnography, Critical Hermeneutics.

INTRODUCTION

Conventional wisdom suggests that play is the antithesis of work. But in some contemporary information technology (IT) organisations, play and work are not seen this way (Reeves and Read, 2009; Roberts, 2016): play is seen as contributing to creativity, engagement and wellbeing (Van Vleet and Feeney, 2015; Yarnal and Qian, 2011). IT professionals expect to be able to play at work (Alexandersson and Kalonaityte, 2018). In an interview with CIO magazine, Stuart Brown of the National Institute for Play explains:

> "The cultural norm says that play is trivial and it's for kids or for the weekends. That's an Industrial Revolution heritage that's tough to change. I don't think I'll see the shift in my lifetime, but the evidence is piling up that play works." (Brown and Nash, 2013)

Brown's suggestion that "play works" is consistent with the way some IT organisations see play. Google has, for some time, integrated play into its work practices (Schmidt et al., 2017). Its Zurich office is a playful workplace that contains "a corkscrew slide, a squash court, a jungle lounge with 100 plants, a western-style saloon (complete with piano), and creatively decorated Swiss gondolas positioned throughout the building" (Google, 2019). For Google, the separation of play from work is an outdated view. Facebook opened its Disneyland-inspired Menlo Park headquarters in 2012, which has, amongst other things, a fully-equipped music studio and video arcade (Bort, 2013). Microsoft has found that integrating play in work practices results in positive effects on product innovation, engagement and social betterment (Smith, 2012).

For many other IT organisations, however, incorporating play into work practices can be a challenge (Schmidt et al., 2017; Smith, 2012): work and play are usually seen as quite distinct, and that may be why many managers continue to see play as a directed activity within a work setting. The distinction between work and play is consistent with the way in which play has been treated in the research literature. The focus has been on the hedonic aspects of play at work (e.g., Starbuck and Webster, 1991; Webster and Martocchio, 1993; Santhanam et al., 2016; Liu et al., 2017). Play has been seen in terms of simple rule

reward-based strategies to optimise behaviour, or as adding a fun component into an existing practice to make it more appealing. Play has thus been treated somewhat narrowly as something that can be managed and controlled.

Attempting to manage play is problematic. Tökkäri (2015, p. 101) says that doing so is "an ambitious pursuit". Play is more complex than previous studies have acknowledged (Kirby and Graham, 2016), with both hedonic and instrumental aspects. While the hedonic aspect of play has attracted wide attention in the guise of gamification (Liu et al., 2013; Liu et al., 2017; Santhanam et al., 2016), the instrumental aspects have been largely ignored. This paper explores the instrumental aspects of play at work.

In an era when the digital is ubiquitous and where play with IT has become commonplace, exploring the nature of play at work might shed light on the broader question of how humans exist in the world. What instrumental aspects are important in making play happen? The paper resonates with recent demands in social studies for more research into the instrumental aspects of play at work (Petelczyc et al., 2017; Hjorth, 2018; Sicart, 2018). Given the exploratory purpose of this research, I ask:

RQ1 Why is play important yet difficult to manage?

RQ2 How do IT professionals use/enact instrumental aspects of play at work?

To answer these questions, I draw on evidence from an ethnographic case. I conducted an ethnography of the everyday practices of IT professionals in an IT organisation in New Zealand. Ethnographic research is ideally suited to answering how and why questions. The fieldwork took place over 18 months. I looked at how and why these professionals were engaging with IT in their work. In this paper, I focus specifically on the instrumental aspects of workplace play practices. These aspects include the spatiality, materiality, temporality and sociality of their practices. I draw on the critical hermeneutics of Gadamer (1989) to inform my study.

THEORETICAL PERSPECTIVE AND RELEVANT WORK

In the Information Systems (IS) and related disciplines, researchers studying play at work in organisational settings have looked at many diverse topics, ranging from service design (van Amstel and Garde, 2016), software development (Kurkovsky, 2015), human computer interaction (Flanagan, 2009), workplace design (Alexandersson and Kalonaityte, 2018), training employees (Webster and Martocchio, 1992, 1993), dramaturgical management strategies (e.g., Kark, 2011; Roos et al., 2004; Salovaara and Statler, 2019), to enhancing productivity (West et al., 2016) and innovation (Isbister, 2016b). Researchers have also looked at play in the context of the presentation of *self* in online environments (Vaast, 2007), organisational learning (Kolb and Kolb, 2010) and intersubjectivity (Jerolmack, 2009). Play has been used to study ways of: making sense of cultural phenomena (Schwartzman, 1979; Geertz, 1973, pp. 412ff); enhancing language skills through social drama (Levy et al., 1992); facilitating user engagement with digital technologies (e.g., Garris et al., 2002; Flanagan, 2009); creative engagement within organisations (Mainemelis and Ronson, 2006; Mainemelis and Altman, 2010); and understanding the intricacies of social interaction and rituals (Turner, 1982; Lefebvre, 2003). In consumer culture studies, play has been used to understand behaviour in retail spaces (Kozinets et al., 2004) and subcultural consumption practices (Schouten and McAlexander, 1995).

Defining Play

This diversity of topics means that there is no consensus about the definition of play. Petelczyc et al. (2017, pp. 165-8) observe that this lack of a single definition has created "ambiguity and confusion about what constitutes play in the workplace". This confusion comes from using multiple perspectives, and each perspective (e.g., anthropological, psychological, existential) offers different insights. Although far from exhaustive, Table 1 lists some of the key sources and definitions of play in the literature (for an extensive review of definitions and theories of play, see Takhvar, 1988).

Source / Type	Definition	Key Concepts
Huizinga (1949) / Hedonic	One of the first modern sociological accounts of play: "a free activity standing quite consciously outside 'ordinary' life as being 'not serious,' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner" (p. 13).	Magic circle; homo ludens
Caillois (1958) / Hedonic	Based on Huizinga, play is defined as "a free and voluntary activity, a source of joy and amusement" (p. 6).	Role play; altering perceptions; chance; competition
Goffman (1961) / Hedonic	Based on Caillois, play is defined as "any particular instance of a given game being played from beginning to end" (p. 33). For Goffman, the concept of game relates to the performance in social encounters since "the basic activity in a game is a move, and moves are neither communicated like messages nor performed like asks and deeds; they are made or taken" (p. 32).	Fun; pleasure; recreation; everyday encounters
Giddens (1964) / Hedonic	Based on Huizinga, play is conceptualised as an "activity which is by and large *non-instrumental* in character. That is, play is not linked psychologically to purposes which are external to the activity and which would dictate its character. On a social level, play is relatively 'self-contained' activity, which is not linked to consequences lying outside the	Moral values; catharsis; work play distinction

	performance of the activity itself. Play is essentially a "nonproductive activity" (original emphasis, p. 74).	
Csíkszentmihályi and Bennett (1971) / Hedonic	Based on Huizinga, play is defined "as a state of experience in which the actor's ability to act matches the requirements for action in his environment" (p. 45).	Flow; action; voluntary fiat
Fink (2016) / Existential	One of the first phenomenological analysis of play that goes beyond mere fun and offers a way to make sense of being there: "Play is a fundamental phenomenon of existence, just as primordial and independent as death, love, work and ruling, but it is not directed, as with the other fundamental phenomena, by a collective striving for the final purpose. It stands over and against them, as it were, in order to assimilate them to itself by portraying them. I play seriousness, play genuineness, play actuality, I play work and struggle, play love and death. And I even play play" (p. 21).	Playworld; ontology of play; polysemy in human play
Gadamer (1989) / Existential	A rich understanding of play. Building on Aristotle, Huizinga and Fink, play is interpreted as a practice that engrosses players and is autotelic. Play is part of the existential human condition and reveals how we engage with world.	Dialogue; engagement; autotelic play; hermeneutics

Table 1 builds on the most recent review of the literature related to play in the context of workplaces by Petelczyc et al. (2017); to their work I add Goffman (1961), Fink (2016) and Gadamer (1989). As Table 1 shows, most scholars have focused on the hedonic aspects of play, while overlooking the instrumental aspects.

Caillois thought that play was a waste of time, energy, ingenuity, skill, and often of money. He acknowledged, however, that play was an essential element of human development. Goffman, a sociologist who based his work on Caillois, adopted a dramaturgical approach to human interaction. Goffman said the concept of a game relates to one's performance in social encounters. By contrast, as a philosopher and a student of Heidegger and Husserl, Fink adopted an existential approach to play. He saw play as a fundamental aspect of our human existence, recognised the instrumental aspects of play and offered critical reflections on the logic of play.

Building on Huizinga, Fink and Aristotle, Gadamer, a philosopher known for his work in hermeneutics, develops a very rich understanding of play. He sees play as an autotelic practice that engrosses players. In a discussion of Gadamer's conceptualisation of play in the context of art, Ryall et al. (2013, p. 103) say that play has instrumental aspects that can transform everyday life in a practical sense (emphasis added):

> "Because of its transformative nature, what arises from the play of art cannot be bracketed from the rest of life. *Art and play both prompt us to action and towards creativity in the other areas of life*. Similarly, our experiences of everyday life cannot also be bracketed from our play, since play gives us new insights into that everyday life."

Play prompts us to do things, suggesting that it has instrumental as well as hedonic aspects.

The term *play* also has multiple meanings (as found in the sources cited above). In a contemporary translation of Gadamer's later writings (Gadamer, 2007), the translator Richard Palmer points out that "in German the same word, *Spiel*, is used to mean both 'play' and 'game.' Our translation will sometimes use

one term, sometimes the other, depending on the context, and sometimes also 'playing the game,' in order to suggest the overtones of motion" (p. 435).

Based on my review of the literature, I define play as a ludic practice with three essential elements: *volitional*, *engaged* and *autotelic*. First, play is *volitional*. As Huizinga (1949) points out, play is a free choice on the part of those playing. People cannot be forced to play. If they are forced to play, then it is no longer play. Second, play is *engaged*. Play is an engaged practice that requires one to be involved with it. As Gadamer (1989. p. 103) points out, "Play fulfills its purpose only if the player loses himself in play". If someone loses interest or is no longer involved, then they are no longer playing. Third, play is *autotelic*, that is, it is enacted for its own sake and not for some other extrinsic purpose: "Play itself contains its own, even sacred, seriousness" (Gadamer, 1989, p. 102).

The above suggests that play is more than just a process or an activity – it is a practice that can only be fully understood when it is interpreted against its social or organisational background. As play is an engaged practice, it is performed or *play-acted* where participants, things and places take various social roles against the backdrop of the everyday. Play is never complete since a ludic practice is always in projection. It may be paused and resumed at the will of the players, but there is no finality to its enactment.

Characteristics of Play

There are three defining characteristics of play: fun, flow, and engagement (Petelczyc et al., 2017). The first defining characteristic of play is *fun*. Ludic practices are performed with an aim to experience pleasure. Most prior studies of play have been built on the concept of *fun* alone (Petelczyc et al., 2017, p. 168). Fun has been successfully used to investigate the relation of enjoyment and computer interaction (Webster and Martocchio, 1992), playfulness and acquisition of skills (Kolb and Kolb, 2010), system design and enjoyment (Liu et al., 2017), motivation in work practices (Statler et al., 2011) and workplace fun and task performance (Fluegge-Woolf, 2014).

The second characteristic of play is *flow* or an "in-the-moment attitude" (Petelczyc et al., 2017, p. 169), originally developed by Csíkszentmihályi and Bennett (1971). People absorbed in (play like) practices often find themselves psychologically removed from outside situations (Van Vleet and Feeney, 2015). This immersion suggests that flow during play creates a distance from the world. Therefore, it is often argued that play occurs in a specific place and at a specific time separate from other practices (e.g., Csíkszentmihályi and Bennett, 1971; Statler et al., 2009; Statler et al., 2011). Others suggest that play does not create or occur in a different world (such as a magic circle, see Huizinga, 1949) but, rather, the immersion in play temporarily transforms a given place whereby a person appears detached from the situation (Goffman, 1969; Turner, 1982; Sutton-Smith, 1997). Such detachment is considered an example of experiencing timelessness and spacelessness (Agarwal and Karahanna, 2000; Mainemelis, 2001). Studies have shown that flow-like absorption is essential to create new ideas in complex work practices such as IT, innovation and software development, and enables distancing from other practices and develops deeper focus (Mainemelis and Altman, 2010; Mainemelis, 2010).

The third characteristic of play is *engagement*. Engagement suggests that active involvement is required; this involvement could be with practice, place, things or people (or any combination of those). Passive absorption, such as book reading, though fun, is not necessarily play or an example of active involvement (Petelczyc et al., 2017). Engaging with a digital device that facilitates interaction (such as video games or interactive reading) could be considered play (Isbister, 2016a).

Instrumental Aspects of Workplace Play

Most prior research has primarily focused on the hedonic aspects of play. In this article, I focus on the instrumental aspects of play at work. I draw on the critical hermeneutics of Hans-Georg Gadamer (1989). Gadamer discusses the spatial, material, temporal and social aspects of play. These aspects are summarised in Table 2.

Spatiality. Gadamer recognises that play is a lived spatial engagement since it is always played somewhere (Gadamer, 1989, p. 107). For an engaged practice, this is the place *where* one engages in

activities. The everyday places are the spatial field of practice, or *playing field*. The playing field sets boundaries of play and creates possibilities to transform the workplace into a playground. Fink (2016, p. 28) refers to the spatiality of play as a *playworld*, a product of everyday space through imaginative transformation. The playing field is neither a formal spatial distinction nor an abstraction of reality; it is simply 'where' play occurs, and hence it can be physical, virtual or symbolic.

For example, Kozinets et al. (2004), in their study of consumers' ludic practices, found that when people engage in playful interactions with IT, they withdraw from the mundane. Kozinets and colleagues reported that "[people] use technology and their bodies to produce parts of the [play] … to create and alter the space" (2004, p. 668) in which they find themselves playing. Similarly, Levina and Arriaga (2014), in their study of online social dynamics in virtual spaces, conceptualise online spatial environments as playing fields in which people take and assign many complex roles and identities.

Table. 2 Instrumental Aspects of Workplace Play		
	Characteristics	**Examples**
Spatiality	Refers to the lived physical or symbolic meaningful places: *Contextual*: determines the spatial context or the "where" of play, which is described as the *playing field* *Enforcing*: it sets boundaries of play *Mutability*: it can transform one place into something else *Liminality*: it can be temporary and in between two places *Aspatial*: it can create a sense of spacelessness, when engaged in play.	Everyday locations; organisations; symbolic places; speculative and imaginative places. See Alexandersson and Kalonaityte (2018) and Schmidt et al. (2017) for exampples.
Materiality	Refers to the emergent apparatus in material culture, the *plaything* one plays with: *Physical*: it can be tangible *Symbolic:* it can be immaterial – intangible or imaginative *Engaged*: it beckons one to engage with it in practices *Transparent*: it can disappear or cease to appear as material when immersed in engagement.	Everyday things and devices embedded in lived places; IT and organisational equipment; discursive and rhetorical equipment. Volitional engagement with materiality is a requisite of play. See van Amstel and Garde (2016) and Isbister (2016b) for examples.
Temporality	Refers to the temporal projection of the play or *playtime*:	Historical time; gradual immersion in the

	Volitional: it depends on one's own accord *Atemporal*: it can create a sense of timelessness, when engaged in play (also related to spatiality) *Historical*: the nature of time is not objective *Repetitive*: a sense of constant repetition of activities.	phenomena; temporal disassociation in creative/playful activities. See Mainemelis and Altman (2010) and Sturges (2013) for examples.
Sociality	Refers to the various social factors related to the actors or *players* in the field: *Dramaturgical*: participants take different roles and identities *Political*: there is a complex struggle between different players *Authenticity*: participants roles refer to different identities in play *Skilfulness*: every play entails some skillset; for play to occur, the players require a certain familiarity with the skills.	Different roles and identities involve in each situation; the roles range from a spectator (detached observer) to a true player (engaged participant). See Schouten and McAlexander (1995) and Smith (2012) for examples.

Materiality. A ludic practice is woven around the materiality of a plaything: play cannot exist without something to *play with* (Gadamer, 1989, p. 106). Here materiality refers to the anthropological stance of contextualising play in a broader material culture (Appadurai, 1988; Miller, 2005). One understands a plaything in terms of material equipment, such as a game board, devices or systems, or discursive equipment such as a rhetorical instrument and apparatus (for example, see van Amstel and Garde, 2016). A plaything is intelligible and makes sense when it is positioned and interpreted within a practice where play is enacted.

According to Gadamer (1976, p. 56), a plaything is never separate from a person (who is engaged with it) but intimately woven together with the skillset of a player in a ludic practice. A plaything is a device to *play with* and is only significant for individuals/players: something that matters to them. For example, in a recent examination of playing with *Pokémon Go* – an augmented reality based game – Hjorth et al. (2017) refer to play with digital data as *playbour* or digital labour enacted by people in everyday practices. Sicart (2014b) goes further and suggests that, for software engineers, computer programming is a critical plaything which also resonates with their personal values. A plaything has a certain cultural familiarity that allows one to play in a meaningful way (also Goffman, 1961, p. 26; Fink, 2016, p. 54). Applying this to digital technologies in work practices, I suggest that IT can be seen as a meaningful device with a certain configuration, or simply as a plaything, with which individuals play in their everyday practices.

The immersive engagement of the player with a plaything makes the engagement itself an elusive phenomenon to grasp because it is often taken for granted. People are ordinarily immersed in their situations, rendering their engagement an invisible practice in which they use devices, or playthings, without paying any attention to them (see Dourish, 2004, pp. 99ff for a relevant discussion). Their practices only become obvious if their play is disturbed. Hence seeking disruptions in play can be an invaluable tool when studying the instrumental aspects of play.

Temporality. The temporality of play has two specific features. First, play is free from everyday temporal restrictions; one can play *anytime*. Second, play encloses the players, and this high interactivity in practice

creates a sense of timelessness (see Geertz, 1973, pp. 433ff for an ethnographic example; Petelczyc et al., 2017). According to Gadamer (1989, pp. 104-5), it is this temporal absorption in play that takes the players beyond any obvious goals and, in so doing, makes play a transparent autotelic ludic practice – at least for the player, it is done for its own sake (for a relevant discussion, see Sicart, 2014a, b).

In their study of immersion in IT phenomena through playfulness, Agarwal and Karahanna (2000, p. 673) note "temporal disassociation", or timelessness, is an important aspect of absorbed engagement in a practice; they define it as the "the inability to register the passage of time while engaged in interaction". This aspect of engagement is also documented by Mainemelis (2001) in a study of the play aspect of organisational practices. He found that participants experience timelessness when interaction is high in their practices.

Sociality. According to Gadamer (1976), for there to be play, there has to be another player (although not literally). This brings us to the sociality of play, which refers to the various roles, identities and complex interactions among various field actors in a playing field. Kozinets et al. (2004) observe that people interact with each other when they use various digital technologies: being-in-play means they not only *play along* but also *play for one another*.

Gadamer says that players can be broadly categorised as follows:

(i) A true player is a participant who is "wholly absorbed" in play (Gadamer, 1989, p. 109).

(ii) A false player is someone who is imitating "being there" in practice; such players still play along, but they do so shallowly. However, a false player can also be learning to play by emulating the practices of others, so is not necessarily a threat to play.

(iii) A cheat or spoilsport who attempts to systematise the play rather than let the play unfold takes over the practice (Gadamer, 1989, p. 103). A cheat is thus a logical threat to the whole idea of play.

(iv) Finally, there is the spectator who can be as equally interested in the game as the players. An absorbed spectator can be *wholly absorbed* in the playing field (Geertz, 1973, p. 423; Gadamer, 1989, p. 110).

I suggest the above distinctions are relevant to research on play at work, which I discuss shortly.

RESEARCH METHOD

I used ethnography to investigate workplace play in an IT organisation. I chose ethnographic research because it is generally accepted as a "method of engagement in the world" (Marcus, 2009, p. 16) and is ideally suited for answering how and why questions (Myers, 2013). I spent 18 months undergoing intensive ethnographic fieldwork at a reasonably large technology organisation in New Zealand. The fieldwork was informed by the principles of interpretive field research (Klein and Myers, 1999).

Field Setting

The fieldwork was conducted at DIGX, a provider of enterprise digital services (all names are pseudonyms). At the time of fieldwork, DIGX was one of the top ten IT service providers in New Zealand. The main organisation had over 300 employees and was divided into five business units; the fieldwork was conducted in the enterprise solutions unit. Although the central focus of the organisation was to develop enterprise web-based solutions, playing all sorts of games, including playful personal interaction, was a core tenet of the young IT professionals that I studied. The initial contact with DIGX was made in July 2013. Soon after the initial meetings, I was invited to join the organisation as a part-time software engineer on DIGXSYS (the flagship software product for enterprise level collaboration and knowledge management) which was part of the DIGXDEV team. DIGXDEV had over 25 members; given the nature of digital work, some were moved to other business units whereas others joined later in the fieldwork. For the next 18 months, I worked approximately three days a week for DIGX. One advantage of being an employee is that I had full access to DIGX, including human and IT resources such as data centres, network and server rooms, and technical documentation.

Background of the Researcher and the Role in the Field

Prior to the fieldwork, I had worked for over 13 years in large and small technology organisations in various countries as a software engineer. Thus, when I joined DIGX, I already had strong everyday familiarity with working in a software development environment. Although I was introduced as an ethnographer, I found myself engaged from the beginning. I was soon placed at the heart of ongoing projects. It was a constant struggle juggling between the two roles of being an ethnographer and an employee.

Therefore, I decided that it was best to immerse myself in the field practices and engage with phenomena as the participants did. This step was methodologically correct and helped me in two ways. First, I could become a true player by becoming wholly absorbed in the world of practice for three days of the week, while being an absorbed spectator at other times. I thus gradually moved into the playing field, learning project-specific knowledge from other members by doing and repeating (often imitating the other practices) various everyday tasks. Second, as reported elsewhere (Chughtai and Myers, 2014a, b, 2017), the participants began to see me as an active member of their social group rather than an external researcher; my software engineer experience combined with my role as a developer helped me to engage with the participants and become a wholly absorbed player in the field.

Data Collection and Analysis

Initially, I was placed in DIGXDEV to work with other software engineers and IT support staff. In the early days of the fieldwork, I had to learn the work practices and various technical details of DIGXSYS. I gradually moved from being an absorbed spectator to a *true player* in the playing field, fully immersed in the field. This level of interaction was reflected in the time spent in the field. In the later stages of the fieldwork, I often spent longer hours (10–12 hours a day) working in the field with other participants, outside traditional working hours. Nonetheless, I am perhaps best described as a temporary true player since the job was not permanent and I was not a permanent part of the organisation.

The primary source of data collection was engaged participant observation (Myers, 1997, 1999). My data sources include attendance at meetings (and active participation in weekly project meetings, user groups and expert groups), formal communications (email, updates), informal communications (instant messaging, email), audio-visual resources (photographs, audio notes), digital resources (project knowledge base, project IT resources) and informal chats as well as working closely with team members on the project knowledge base. Field notes were taken daily and often in the presence of participants, and on occasion while an event was unfolding. Notes were almost always taken on a personal workstation or mobile device. Field notes contained details of the project work, interaction with participants, and participants' engagement with IT practices. In my analysis, by IT I mean and include data related to working on large scale IT projects (such enterprise systems and architecture), specific IT work (such as programming and designing) and working with various digital devices (including personal computers, mobile, large servers, etc.). Some of the field notes documented spatial, temporal and mundane details such as the weather, the mood of the participants and the office environment.

I also conducted ten semi-structured qualitative interviews with select participants, using the guidelines suggested by Myers and Newman (2007). All the interviewees were part of the DIGXSYS team. The interviews were conducted after I had spent a substantial amount of time in the field and was familiar with the field practices. Hence, the interviews were often highly candid and confessional in nature. The interviews were one to two hours long, and were digitally recorded, except one at the request of the participant (for personal reasons unrelated to the fieldwork).

A NARRATIVE OF WORKPLACE PLAY

At first, I did not apply a theoretical lens as I was primarily focused on exploring how participants interact with IT in an organisational setting. I also did not intentionally look for play let alone particular instrumental aspects of play in work practices. However, after some time in the field, the concept of play emerged as a useful way to make sense of engagement. Therefore, from my ethnographic data, I

iteratively developed a narrative to make sense of my fieldwork using the concept of play (Van Maanen, 1995, p. 134; 2011). The narrative is presented in seven interrelated parts.

Part 1: Who are the Players

Play only happens if there are players. The primary participants of the study were software and support engineers (May, Mel, Moe, Max, Moss). I also paid attention to the practices of their more experienced counterparts, which included the members of the management team, IT project managers and directors (Sean, Sue, Sonya).

The sociality of workplace play of DIGXDEV can be seen in specific ways. For example, when Matt was temporarily away, Max put a photograph of Matt's face on a piece of cardboard and placed it on his desk (Figure 1). This ostensibly bizarre interaction was followed by others giving Matt a *body* and attire. The cardboard 'Matt' was playfully brought to meetings and often addressed as if he were truly there. Some also spoke on his behalf during these interactions. Although this instance of practice had nothing to do with engagement with IT per se, it does illustrate the sociality of the players and that *being with others* in the team is important in the context of IT organisations (see Tökkäri, 2015 for some examples of organizational play and significance of fun in work practices).

== Insert Figure 1 about here ==

People who were not part of the role play appeared confused about what was going on (also reported by Kozinets et al., 2004; and Schouten and McAlexander, 1995). In one such instance, the team had to explain to an astonished senior manager how Matt is *there*, even though she could not actually find him in the office. Extending Matt's example, the sociality of play cannot be taken as necessarily involving another person in actual or symbolic form. It is possible for a person to play with a plaything by themselves, as the following excerpt from my field notes shows:

> "Now, [Max] is, again, absorbed in [his] … work, ignoring most chitchats from [Sue and some visitors] and simply replies with a mutter, "Hmmm," [he is also] biting nails occasionally and

> constantly shaking feet [intensely]; he is restless and anxious [and lost in work]. An interesting aspect is that he was visibly disconcerted every time his absorption was broken [by chitchats and visitors], just as if someone is interrupting a serious task." (*Excerpt from the field notes*)

This excerpt illustrates a seriousness to workplace play vis-a-vis a serious engagement (Gadamer, 1989; Sørensen and Spoelstra, 2012). Max was visibly disconcerted when his immersion in the task was broken. The visitors chatting in the office were potentially spoilsports for Max, threatening to disrupt his concentration. Hence, there are not just different kinds of players, as explained earlier, but also even true players are not always wholly absorbed in a play world. Most of the members of DIGXDEV were distracted by the visitors at the time of the event above, with only Max staying focused on the play. This event also shows how sociality is intricately entwined with temporality. Spoilsports inhibit the playtime, pose threats to innovation mechanisms, and potentially force players to alter their practices and places.

Part 2: Why One Plays

To understand why play manifests in practices, I begin with an analysis of why one plays in the first place. From the perspective of the IT professionals in DIGIXDEV, their practices revealed that they were engaged in a *non-directed play* for its own sake (Fink, 2016). They played because they wanted to play. They pursued innovation (as play) because they wanted to innovate (to play) (see Bateson and Martin, 2013 for a related discussion of innovating as playing). There was no external motivation (e.g. pressure from management, rewards, stimulus).

Instrumental aspects of play manifest in order to improve play which, in turn, improves engagement with practices. For example, the participants were tinkering to innovate or build new exciting solutions: using software tools in unconventional ways or use programming practices to develop pet projects that would improve their technical skills. They used the built solutions for problem solving but also to improve their engagement with practices (play). They were also toying with physical playthings (such as Lego) as sense-making devices (as documented in Part 6). These were not directed activities. None of this was in their job descriptions nor were they obliged to go beyond their specified tasks and find new and

innovative solutions. What I observed in the field can be described as a non-directed sense of play. The play practices of DIGXDEV were organic and often went against the organisational norms of directed and specified activities. Despite this non-directedness, the participants were in control of when and how they played, but it was not something that they managed.

In contrast to playing as a non-directed activity of participants, I observed that managers wanted to keep play under control (a directed sense of play): they wanted to manage engagement using game elements (e.g. rewards) to steer the behaviour of the employees in a certain direction (i.e. to be productive at work). Management wanted to impose a rationale for play or *why* they should play. This created issues related to immersion and engagement, discussed further in Part 7.

Part 3: How One Plays

Later in the fieldwork, I observed that many participants regarded engagement with work practices as being at play with technologies in a playing field where they learn and develop IT solutions. Based on those observations, I show how instrumental aspects of play manifest in the field. Consider Mel, who saw a clear separation between herself and the management. For her, instrumental aspects of play manifest through adaptation in a multi-level interaction of practices that is always in flux. Mel once shared her experience of how she understands new staff arriving at DIGX and their encounter with organisational IT as adapting to ongoing play. For her, new staff must learn to play by the rules, which involves learning the organisational practices (the boundaries in the playing field). Mel put it succinctly:

> "[New staff] will be adapting themselves and their *use* of technology … where their individual use [of IT] is going to be separate [from organisational practices] … maybe for the [management] it would be less separated just because [they are] more heavily invested in [their strategies]." (*Interview with Mel*)

As Mel highlights, new players to a playing field bring with them previous practices that are often different from those in the current organisation. New staff have to adapt to these organisational practices,

but might steer these existing practices in new directions. Thus, play is a moving target, or a continual adaptation.

Further, there is often a political aspect of play in the workplace (Alexandersson and Kalonaityte, 2018). For instance, the managers and the participants often *played* in a constant 'tug of war' of competing understandings of (technological) practices and strategies. While management did not prohibit using computers for non-work-related activities, it was frowned upon and managers would often complain about the staff spending "too much time" on *the Internet*. Moe confessed to me that a project manager once told him off because "excessive bandwidth" was reported to his user account. "It was just YouTube *in the background*, you know," he registered in protest with a rather shocked expression. The political aspect of play in the workplace thus resulted in some tension between those who wanted to manage the practice (i.e. managers) and those who were engaged with the practice (i.e. the young IT professionals). The young IT professionals tended to treat the managers as 'false players' in the playing field, but saw themselves as true players, freely and wholly absorbed in the technology. A particular place (playing field) thus allows for the articulation of play, but the presence of a disengaged other on the field is a potential threat to play/engagement.

Part 4: Where One Plays

After a few months in the field (see Figure 2), it became clear that organisational places are not simple locations but a complex spatiality in which many (playing) fields are created by the participants (and the researcher). The players interacted with workplaces in ways fit for their various purposes in play. For instance, within DIGXDEV, people understood some of the software systems as "playgrounds", "lounges", "sandboxes" and "sandpits". It is tempting to take such ludic places in a literal sense because they exist in physical or virtual spaces (such as "sandboxes"). However, according to Sutton-Smith (1997), the ludic vocabulary often points to deeper structures of understanding and formation of identity in practices. For example, Scholz (2013) conceptualises the Internet as a playground. In the same spirit, I

accept my participants' position that digital environments can be understood as personal spaces to design, develop, test and, in effect, bring new innovative solutions to the fore.

Sean once described software prototyping as the building of "sandcastles" in the "sandpits" and said that "it is play" that can only be done in "a specific space". Max, likewise, frequently referred to his workplace as his "play area". When applying the spatial aspect of play, I interpret Max's insight as the playing field or the "field of activity" where play is enacted (Gadamer, 1994, p. 86; also Küchler, 1994, p. 31). This is relevant to free engagement with technologies in workplaces for two reasons. First, familiar places emerge as playing fields; places that provide freedom and promote volition that can lead to development of new solutions. Second, a playing field can be used as a "springboard" to test ideas in a safe environment (Hoare, 2002, p. 124).

== Insert Figure 2 about here ==

In Gadamerian scholarship, *Spielraum* is used to convey the spatiality of play. The word can be understood literally as a playing field or play room but it can also be understood metaphorically as elbow-room, leeway or freedom of possibilities (Arthos, 2013; Di Cesare, 2013). Hence, the work*place* (playing field) is not necessarily a fixed physical place. In DIGX, the *software* was also often seen as a *place* within which the players play. For instance, reflecting on an event concerning an IT solution, Max implicitly invoked the playing field concept and indicated software as his "domain":

> "[For me,] that's something that was in my control which, as a software engineer, I like to feel in control just 'cos I feel that software is my domain." (*Interview with Max*)

Here, again, online and digital technologies are akin to places (domain) over which a player has personal control. Most of the time, however, since the (playing) field is taken for granted, it remains invisible and inaccessible to researchers. One strategy to bring invisible practices to the fore is to seek practice breakdowns such as organisational restructuring, system faults or reallocation of resources. This strategy was an invaluable tool in examining the inner working of the playing field. However, if a breach occurred

in the playing field, such as a software malfunction, the participants often got frustrated and tried to restore not just the software tool but also the places that enveloped it. They tried to "make it in such a way that it works how I expected or, at least, works for my purpose at the time", as Moss passionately explained. In this way, it is possible to restore the spatial integrity of the field using strategies that facilitate play like practices (van Amstel and Garde, 2016).

Part 5: When One Plays

Although there were strong expectations about project deadlines, at DIGX, like many software development organisations, there were no written rules about when people should start and stop work. This organisational practice may have increased workplace play.

The participants tended to lose themselves as they fluently engaged with the IT phenomena in their workplaces. To paraphrase Agarwal and Karahanna (2000): When I am at play, time flies. Mainemelis (2001) says that absorption in play creates a sense of timelessness in organisations. In such absorptions, play takes primacy, and the players' skills automatically focus on what is significant. In this perspective, a ludic practice is never complete as it is always in projection. I observed this same projection in the field:

> "I was working on a task for [DIGXSYS], and remotely connected to two virtual machines; a server and Joe's machine which was 'imaged' on Max's workstation. As I tried to access Joe's [virtual] machine, I realised that I have [suddenly] lost access. [After trying many different solutions], I went to Max and asked if he can take a look, he was in the middle of a programming task, but as he looked at me and asked for more information [while still engaged with the task at hand]; I noticed he was still writing code though not looking at the screen [anymore]." (*Excerpt from the field notes – continues next*)

I had interrupted Max's concentration while he was working on his own task. While the interruption was not intentional, it was an opportunity to examine the practices in an intimate way. Indeed, such non-

deliberate interruptions are one of the strategies used to reveal the high order instrumental aspects of practices (Sandberg and Tsoukas, 2011, p. 348). The episode continues:

> "[After,] I gave him the details he turned to the screen; [he then first] finished what he was doing, switched to [another software], and began to investigate the issue. He went silent [and I realised that] I was still talking to him about a possible solution, he [acknowledged it and] said "I'll have to *play around* a little with it." I [then] found a workaround, and I went back to resume my work." (*Field notes*)

Here it is possible to shed light on the temporality of play. First, everyday practices are seen as a series of play encounters (Goffman, 1961). For example, when I interrupted Max, he finished what he was doing and then immersed himself in the problem I presented to him – the only way he could solve that problem was to "to play around" with it. Second, Max was not just (temporally) lost in trying to solve a certain technological problem, but also fully engaged in a situation. He was engrossed in practice; his engagement with the task at hand had taken over and time stood still. Hence, an important insight from this ethnographic episode is that playtime is important for both individual practitioners (in this case, Max) and researchers studying engagement. Here, I agree with Mainemelis and Altman (2010) that immersive playtime in organisations is an important but under-researched topic that can lead to new and novel ideas.

Part 6: What One Plays With

In workplace play, both the sociality and materiality of IT revealed it as a plaything in five distinct ways.

First, playing with IT was related to the gradual acquisition of complex skills (cf. Dreyfus and Dreyfus, 2005). These include, but are not limited to, learning digital design, technical analysis, enterprise web architecture and familiarising oneself with technical documentation. The participants often reflected how they had learned an IT related skill by simply "playing with it" to start with and then mastering it as if they progressed through a game. For them, the more they *played,* the better they got. Indeed, they said they did not do it for material or immaterial reward but simply for the sake of "playing" a new thing; they

enjoyed learning about IT as an end in itself – play is autotelic. Max explained the logic underlying his learning practice involving a new technology:

> "What I would do is … play around with it as much as I can in its [original] form, and then I'd go 'poke around the settings', see what settings are available and then play around with the settings and see what's happened" (*Interview with Max*)

This everyday observation shows how IT staff use tinkering as a playful strategy to make sense of their work practices (Turkle, 2017). Moreover, this aspect of workplace play allowed me to re-examine my own practices in the field. I, too, had to "get lost" in workplace play, often finding the distinction between *work* and *play* blurred. One of the tasks that helped me was related to intense computer programming in order to work *along with* the participants. May reflected that her IT work was like playing in which she must "solve puzzles" in order to move to the "next levels" of the play. She said:

> "When you are doing programming, it is kind of like a game. When you *play* a game, you want to pass a level and go to [the] next; same is in programming, when something is new I want to solve that problem and pass [the level] … but I really have to pass, so when you solve the problem you make it doable … because there are so many [ways] … to solve the problem, that's interesting but … when you have solved a problem and if second time you come across it again, it's not so interesting anymore." (*Interview with May*)

May and the others were interacting with IT phenomena when they were *playing with it* but became bored if they were no longer learning something new. Moreover, playing with IT is not necessarily the opposite of work practices (as discussed by Tökkäri, 2015, pp. 95-6); rather, play relates to learning and skill development.

Second, workplace play with IT was deeply rooted in the participants' everyday practices. The participants take ubiquitous IT for granted because that is what they have grown up with. For instance, Max once reflected on his everyday encounters with IT as being like playing with Lego. He recalled:

> "I think it [i.e. the playing aspect] just always seems to have been there [since childhood]. One of the big things for me about [ubiquitous IT] is that it's like Lego and… [like playing a game] you've got all the pieces always with you and you can just make stuff there. And then you've always got [all sorts of] information that you need to do stuff with." (*Interview with Max*)

Max reveals that his relationship to ordinary play is the same as his relationship with complex digital tasks. Turkle (2017) makes a similar observation of a computer programmer who related her poetry to her code: "She wanted to tinker, to work as close to the programming code as she did to the words in her poems" (p. 53). Second, the concept that playing with IT 'always seems to have been there' suggests that Max understands IT as a pervasive everyday phenomenon. For as long as he can remember, IT has been there to be played with. For these young IT professionals, IT is an essential part of their everyday lives (Van Vleet and Feeney, 2015). Similar examples of playing with artefacts to make sense of complex IT projects are well documented in the studies of practices of IT professionals in organisations such as Microsoft and Google (Levy, 2011; Schmidt et al., 2017; Smith, 2012).

As it happens, Matt had pieces of Lego in his workplace (see Figure 3). He once referred to the Lego blocks as a metaphor for the strategic solution building to a complex problem on his screen. "This," referring to the Lego blocks, "has to become like that," he said, as he pointed to the programming code on the screen. In such engagements, of course, the participants were referring to making sense of the problem rather than an actual physical relation. Although Matt was not familiar with the concept of Lego Serious Play (a play strategy using bricks to make sense of complex problems), his insights are remarkably similar to its strategy (Miller, 2017; Kurkovsky, 2015). Taking all these insights together, it seems to us that the plaything (in this case, IT and Lego) is instrumental in fostering workplace creativity and problem solving. Despite this, these complex playthings were often dismissed by the senior managers as *mere toys*.

== Insert Figure 3 about here ==

Third, IT is an integral part of workplace play (Mainemelis and Ronson, 2006; West, 2014). Sean and Sue mentioned that many key software components of DIGXSYS had unknowingly started as "pet projects." What were once referred to as just "toys" by the management later became an integral part of the organisation's IT infrastructure. Sean and Sue recalled that people often began to *play with* a certain technology, but after a while, the status of that technology changed from that of a plaything to a business tool. But, once a plaything left the domain of the players, it was abandoned by the players. Here I see a paradox emerging. Sonya and Sean mentioned that many software developers were often enthusiastic in the beginning (when they were still playing), but once the outcome was considered valuable and integrated into the organisation's IT structure, play stopped. As for the management, it was a conundrum; they were baffled and could not understand why the developers suddenly lost interest in their pet projects. The paradox lies in the fact that one cannot command others to play; for play to count as play, it must be voluntary and volitional. I discuss this workplace play paradox in more detail later.

Fourth, the extent to which IT was regarded as a plaything depended to a large extent on the perceived aesthetics of it. Mel commented:

> "I think aesthetics are becoming increasingly important to the way, you know, our sense of enjoyment of it and perhaps functionality. Cause you can be like 'oh it is functional, but it is also pleasing to look at,' you know, and … that's all kind of interrelated." (*Interview with Mel*)

Later I discovered that the participants enjoyed working on what they regarded as their own *beautiful* software but treated older legacy software with disdain. Aesthetics is integral to play; however, the presence of the former does not mean the emergence of the latter. Some playthings or play places were considered beautiful by my participants, whereas others were *ugly*. Figure 4 displays their discontent towards a popular development framework ("Xamarin") which the participants considered ugly and unplayful.

== Insert Figure 4 about here ==

Fifth, the participants used IT for both personal and work purposes, and tended not to make a clear delineation between the two. They used their mobile phones and the organisational instant messaging system for both personal and work purposes. They also used the digital projectors at work to show movies during festive periods (see Tökkäri, 2015 for similar examples in organizational settings). While these examples might appear trivial, it mattered to the participants and, therefore, is of critical value to the ethnographic interpretation of play.

Considering what one plays with and how one plays during workplace play, a key lesson is that a player should not be separated from their plaything. The evidence suggests that the young IT professionals are only truly engaged with technology when they are playing with it. As soon as IT ceases to be a plaything, workplace play begins to fade, and they quickly lose interest in their work.

Part 7: The Paradox of Play

The IT professionals were absorbed in their own practices as if in deep play, which was volitional and not done for any external reward. This autotelic aspect of workplace play points to a much deeper issue. For example, although they are paid employees, they liked to solve problems for the sake of solving them. Management, by contrast, had a different view of play. While they recognised the value of play (as a directed activity) for creativity and innovation, they also wanted to keep workplace play under control. Sonya confessed:

> "Playing and working? I hope there's *a bit* of playing. I mean you can't just work; it's got to be fun being in work. The work environment has to be a bit of fun but there's a serious side of it all, in that I'm here to make sure the IT at the [DIGX] keeps going, and I'm providing what's needed by our customers. So hopefully *it's not a playground* there [referring to DIGXDEV] (laughs). [Still] There's a lot of work that's being done by the technical staff [related to] innovation ..." (*Interview with Sonya*)

Sonya wanted to encourage creativity and innovation in DIGX, but feared that DIGX will turn into a "playground". This creates problems regarding the authenticity of workplace play because if people detect that one is ordered to play (in a certain way), it ceases to be play and also triggers dislike toward management. To Sonya, the traditional distinction between work and play was clear. She later remarked that "if someone thinks of a great idea that reduces, you know, saves us lots of time and does lots of things for the [DIGX], I'm sure I'll give them a *reward*." She failed to understand that play unlike gamification is not done for a reward. In fact, the strategies such as gamification can be detrimental to instrumental aspects of play and can lead to disengagement (see Meisiek and Hatch, 2008; Bogost, 2014; Sicart, 2014b). Play cannot be strictly managed; neither can it be triggered on demand.

Sean, like Sonya, was sympathetic to the idea that play was important at work, but he too thought that the play like practices of the young professionals needed to be directed, if not strictly managed:

> "[the organisation practices and people's practices] *have to be separate* … I need the rules. Norms [referring to the increasing use of IT in everyday life] mean another thing, [and organisational] culture means another thing but [in either case] you need the rules … otherwise the organisation will be really chaotic. Now, I know that social networking creates a lot of stir-ups, core innovations [etc.], that's good, I'm not against the idea. But, [there are] some other things that need to be in line, that means that they need to be, you know (laughs), *within the boundaries*." (*Interview with Sean*)

The message from management was clear. Play had to occur *within* the boundaries set by management, and it had to be *managed*; the staff had to adapt to the culture of the organisation (not the other way around). However, from the perspective of the participants, the members of the management team risk appearing as false players who were, potentially at least, a threat to their play.

This conflict of interpretations between the participants and management reflects the paradox of play. Management often wants to encourage play because of its instrumental use in encouraging creativity and

innovation, but they also want to control it. However, play, by definition, cannot be controlled; it is a volitional practice and done for its own sake. The attempt to manage play in order to facilitate engagement could have the opposite effect of what was intended; the young IT professionals could become disengaged and detached (see also West, 2014). However, at DIGX, the unresolved tension between the software professionals and management meant that some participants began to talk about leaving the team or the organisation, while some managers were trying to develop new strategies to retain them. Could the paradox of play be one reason why many organisations are struggling to integrate young people into their workforce?

DISCUSSION AND CONCLUSIONS

Play is complex. To play is to have fun, to fantasise, to learn, to behave following specific rules, to win, to lose. Yet, play is more than participating in a game. In addition to the hedonic aspects, play also has instrumental aspects: play does things. In a world that is increasingly digital, play is also about interpreting (digitally mediated) *values* and significance attached to things, places, and people in one's practices (Chughtai, 2020). This paper has uncovered why play is central to workplaces; more than fun, people use play to explore and explain their relationship with organisational practices and places. Play is one of the ways in which we engage with the world.

Contributions to Research

This study makes specific contributions to the research literature. First, whereas prior theoretical explorations of play at work have primarily focused on the task and gamification aspects of IT work, I have extended the research literature to include Gadamer's conceptualisation of play as part of the existential human condition: there is no clear boundary between work and play. I found that IT professionals' play at work is their way of seeing and being in the world.

In the IS literature, the current theoretical understanding of play is primarily built around hedonic aspects, such as the gamification of a process, which: uses game concepts to invoke fun and enjoyment,

(re)configures user behaviour for flow, and manages motivation to increase productivity (Hamari and Koivisto, 2015). Prior studies have focused on gaming concepts to gain expected behaviour and optimal performance (Mainemelis and Ronson, 2006; Liu et al., 2017). In contrast, I uncovered aspects of play that centre on instrumental goals such as fostering human values, developing social relationships, learning new skills, or managing one's identity. In this way, this study extends the prior research on play in the context of organisational places (Hunter et al., 2010) as well as virtual environments (Eklund and Johansson, 2013; McKenna and Chughtai, 2020) and suggests that play in practice can promote social relationships, mitigate conflict, and improve cohesion in digital practices.

Second, I discovered how people play in their IT work practices (by programming, problem solving, and design exploration in project work). In the IT organisation studied, playing at work was their way of working (Salovaara and Statler, 2019). I observed that when people were in engaged in play like practices, they were acutely aware of their environment, the playing field, the key players (including false players or spoilsports), and how these players engaged with their playthings (such as IT artefacts and digital gadgets). They were also mindful of other players (such as fellow team members and management) and when they were able to play (depending on their work schedule and working patterns).

Third, I have shown that while play can have instrumental as well as hedonic aspects, *instrumental play* is a contradiction. I clarify and reject the popular misconception that play can be instrumental. Instead, some instrumental aspects of play can manifest in practice. I also warn that attempting to instrumentalise play (in theory) can lead to serious issues of disengagement (in practice). For example, DIGX's management attempted to promote and manage play in the workplace, but this led to distrust and was seen by the participants as a barrier to the volitional and playful engagement with technologies. Play should not be seen as something that can be enacted on demand.

This study has provided tentative answers to the research questions. RQ1 asked "Why is play important but difficult to manage?" I have shown that, from a critical hermeneutic perspective, play is important because it offers insights into modes of existence. The starting point was that play is considered autotelic

insofar as play theorists agree that play is enacted for its own sake; I agree but the autotelic view is problematised by the rise of digital technologies in workplaces. In the studied practices, play had instrumental aspects as well. These aspects relate to the spatiality, materiality, temporality and sociality of their being in the world. While some aspects of play are indeed autotelic, I cannot ignore the instrumental aspects. This leads to RQ2, which asks "How do IT professionals enact play?" IT professionals used play with technology to explore, design, innovate, and problem solve. There is no one way to play. Participants were engaged in "playful tinkering" in the digital age (Hjorth, 2018, p. 9; Sicart, 2018); they were so closely immersed in IT that it was almost impossible to separate play from work and vice versa. Play adds value to one's practices but resists control and management. What can practitioners and managers do to integrate play in workplaces?

Contributions to Practice

My findings have some practical contributions. First, many IT professionals are motivated by play and play is intrinsic to their IT development work. Hence, organisations may wish to encourage, rather than just tolerate, play at work. However, while some IT work might be more playful (such as programming related tasks), not *all* IT work involves play. Nonetheless, at DIGX, all software developers regarded IT as an everyday plaything.

Second, the study's findings throw into question the current trend of companies introducing gamification into workplaces. Gamification usually involves implementing reward-based game aspects to processes. However, reward is too simplistic a trigger to initiate or sustain play in practice. People do not participate in play primarily for a reward or competition; rather, they often engage in play for its own sake. Play, by definition, requires engaged involvement. The findings challenge the common-sense notion of gamification having as its main purpose the receiving of a reward. For example, the "pet projects" of the participants were usually done for no reward other than for their own sake, yet some of these projects later became part of the organisation's essential IT infrastructure. Rather than trying to control play, organisations that prioritise creativity and innovation may want to create play places where free play can

flourish (cf. Kolb and Kolb, 2010). This suggestion is consistent with contemporary critical research on the use of games and the interpretations of play in digital work practices (e.g., Bogost, 2014, 2015; Sicart, 2014a, b).

Third, and following on from the last point, trying to control or manage play in the workplace is potentially problematic. The paradox of play is that while management often want to encourage play, they might only do so because of its instrumental use in encouraging creativity and innovation. They might also have a hidden agenda, such as wanting people to work longer hours in the workplace. While the DIGX management were happy to reward innovations that emerged as a result of play, they also wanted to control play as a directed practice. They wanted clear boundaries between work and play. However, having task-oriented play in which the game is controlled runs counter to the idea of autotelic and free play (see Kim and Werbach, 2016; Sicart, 2018). The young IT professionals at DIGX viewed the management's attempt to control play not only as a threat to their play but also as a threat to their engagement with work and their digital world.

Thus, a key lesson for IT management is to take a freer approach to play when managing digital work. I acknowledge, however, that finding the right balance between play and work might be a challenge for many organisations. There is no blueprint to achieve play in practice. Hence, while play is an exceptionally rich way to encourage engagement, as Tökkäri (2015, p. 101) also pointed out, trying to manage workplace play can undermine play and lead to disengagement.

Limitations and Future Work

I acknowledge specific limitations of this work. First, I focused only on the practices of one group of IT professionals. It might be useful to explore whether and how other groups such as more experienced IT professionals play at work. Second, I studied an IT organisation in a developed country; hence, the findings might not directly apply to IT organisations in other countries, cultures or social groups. It would be interesting to explore the concept of play in diverse settings such as those of Global South. Third, the study did not entail contrasting play of diverse groups. A comparative account of play was outside the

scope of this work but I hope researchers will extend this study's insights to conduct comparative research of play in practice. Fourth, given the ethnographic nature of this work, I did not know in the beginning what aspects of play will be instrumental (or what I will find in the field, more generally). While I have uncovered some instrumental aspects of play, there might be others (e.g., those related to culture, politics, gender, and history). Researchers are encouraged to extend this study and explore other instrumental aspects of play.

Finally, I have not examined the dark side of play, including the use of gamified aspects in everyday or work practices (Petelczyc et al., 2017, p. 176; cf. Sicart, 2014b). The dark side of play could potentially lead to negative behaviour such as exploitation, addiction, cyberbullying, internet grooming, coercion, harassment, alienation and abuse. A conceptualisation of *good play* is required that builds on and foster human values by using digital technologies to promote play in an ethical way, in everyday practices. As the younger generation tends to be more intimately engaged with new developments in IT in their everyday practices, they are potentially more vulnerable to the dark side of play. Some marginal groups (such as disabled people, older people, and people with less digital literacy) might also be vulnerable. Hence, a promising area for future research is the ethical and moral dilemmas related to the development of *good play*.

ACKNOWLEDGEMENTS

Earlier versions of this work were presented at the 18th Pacific Asia Conference on Information Systems (PACIS 2014) and the 20th Americas Conference on Information Systems (AMCIS 2014). Michael Myers contributed to an earlier version of this paper. Meticulous advice and critique from the Senior Editor, Frantz Rowe, who stood by me during a rigorous peer review process, also helped immensely to eliminate any errors and improve the text. Finally, I wish to thank the associate editor and the review team for their many valuable comments. All errors remain mine.

REFERENCES

AGARWAL, R and KARAHANNA, E (2000) Time Flies When You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage. *MIS Quarterly* **24(4)**, 665-694. doi: 10.2307/3250951.

ALEXANDERSSON, A and KALONAITYTE, V (2018) Playing to Dissent: The Aesthetics and Politics of Playful Office Design. *Organization Studies* **39(2-3)**, 297-317. doi: 10.1177/0170840617717545.

APPADURAI, A (1988) The social life of things. Cambridge University Press, Cambridge.

ARTHOS, J (2013) Gadamer's Poetics: A Critique of Modern Aesthetics. Bloomsbury, London.

BATESON, P P G and MARTIN, P (2013) Play, Playfulness, Creativity and Innovation. Cambridge University Press, Cambridge.

BOGOST, I (2014) Gamification is Bullshit. In *The gameful world: Approaches, issues, applications*. (Walz, S. P., and Deterding, S. (eds)), MIT Press, Cambridge, vol. 65-79.

BOGOST, I (2015) How to Talk about Videogames. University of Minnesota Press, Minneapolis.

BORT, J (2013) *A Tour Of Facebook's Disneyland-Inspired Campus Where The Shops And Restaurants Are Free*. Business Insider, See https://www.businessinsider.com.au/facebooks-disneyland-inspired-campus-2013-10 (accessed 1 April 2019).

BROWN, S L and NASH, K S (2013) *How Play at Work Can Lead to IT Innovation*. CIO, Framingham, MA, See https://www.cio.com/article/2387406/staff-management/how-play-at--work-can-lead-to-it-innovation.html26/03/2018).

CAILLOIS, R (1958) Man, play and games. Thames & Hudson, London.

CHUGHTAI, H (2020) Human Values and Digital Work: An Ethnographic Study of Device Paradigm. *Journal of Contemporary Ethnography* **49(1)**, 27-57. doi: 10.1177/0891241619855130.

CHUGHTAI, H and MYERS, M D (2014a) A ludic perspective on everyday practices: Evidence from ethnographic fieldwork. In *20th Americas Conference on Information Systems (AMCIS)*. (Mclean, E., Watson, R., and Case, T. (eds)).

CHUGHTAI, H and MYERS, M D (2014b) Playing with IT: Ethnographic Research on the Technological Practices of Young Professionals. In *18th Pacific Asia Conference on Information Systems (PACIS)*. (Siau, K., Li, Q., and Guo, X. (eds)), Chengdu, China, pp. 1-11.

CHUGHTAI, H and MYERS, M D (2017) Entering the field in qualitative field research: a rite of passage into a complex practice world. *Information Systems Journal* **27(6)**, 795-817. doi: 10.1111/isj.12124

CSÍKSZENTMIHÁLYI, M and BENNETT, S (1971) An Exploratory Model of Play. *American Anthropologist* **73(1)**, 45-58. doi: 10.1525/aa.1971.73.1.02a00040.

DI CESARE, D (2013) Gadamer: A Philosophical Portrait. Indiana University Press, Indianapolis.

DOURISH, P (2004) Where the action is: the foundations of embodied interaction. MIT Press, Cambridge, MA.

DREYFUS, H L and DREYFUS, S E (2005) Peripheral vision: Expertise in Real World Contexts. *Organization Studies* **26(5)**, 779-792. doi: 10.1177/0170840605053102.

EKLUND, L and JOHANSSON, M (2013) Played and designed sociality in a massive multiplayer online game. *Eludamos-Journal for Computer Game Culture* **7(1)**, 35-54. https://eludamos.org/index.php/eludamos/article/view/vol7no1-2

FINK, E (2016) Play As Symbol of the World: And Other Writings. Indiana University Press, Indianapolis.

FLANAGAN, M (2009) Critical Play: Radical Game Design. MIT Press, Cambridge.

FLUEGGE-WOOLF, E R (2014) Play hard, work hard. *Management Research Review* **37(8)**, 682-705. doi: 10.1108/MRR-11-2012-0252.
GADAMER, H-G (1976) Philosophical Hermeneutics. University of California Press, Berkeley.
GADAMER, H-G (1989) Truth and Method. 2nd rev edn., Crossroad, New York.
GADAMER, H-G (1994) Heidegger's Ways. State University of New York Press, New York.
GADAMER, H-G (2007) The Gadamer Reader: A Bouquet of the Later Writings. Northwestern University Press, Evanston.
GARRIS, R, AHLERS, R and DRISKELL, J E (2002) Games, Motivation, and Learning: A Research and Practice Model. *Simulation & gaming* **33(4)**, 441-467. doi: 10.1177/1046878102238607.
GEERTZ, C (1973) The interpretation of cultures. Basic Books, New York.
GIDDENS, A (1964) Notes on the concepts of play and leisure. *The Sociological Review* **12(1)**, 73-89. doi: 10.1111/j.1467-954X.1964.tb01247.x.
GOFFMAN, E (1961) Fun in games. In *Encounters: two studies in the sociology of interaction*. (Mcginnis, R. (ed)), Bob Merril, Indianapolis, pp. 15-81.
GOFFMAN, E (1969) Where the action is: three essays. Allen Lane, London.
GOOGLE (2019) *5 surprises about Google Zurich*. Google, Zurich, See https://careers.google.com/stories/5-surprises-about-google-zurich/ (accessed Jan 2019).
HAMARI, J and KOIVISTO, J (2015) Why do people use gamification services? *International Journal of Information Management* **35(4)**, 419-431. doi: 10.1016/j.ijinfomgt.2015.04.006.
HJORTH, L (2018) Ambient and soft play: Play, labour and the digital in everyday life. *European Journal of Cultural Studies* **21(1)**, 3-12. doi: 10.1177/1367549417705606.
HJORTH, L, HORST, H, GALLOWAY, A and BELL, G (eds) (2017) *The Routledge Companion to Digital Ethnography*. Taylor & Francis, New York.
HOARE, C H (2002) Erikson on Development in Adulthood: New Insights from the Unpublished Papers. Oxford University Press, Oxford.
HUIZINGA, J (1949) Homo Ludens: a study of the play element in culture. Routledge & Keegan Paul, London.
HUNTER, C, JEMIELNIAK, D and POSTULA, A (2010) Temporal and spatial shifts within playful work. *Journal of Organizational Change Management* **23(1)**, 87-102. doi: 10.1108/09534811011017225.
ISBISTER, K (2016a) Connecting through play. *Interactions* **23(4)**, 26-33. doi: 10.1145/2946999.
ISBISTER, K (2016b) How Games Move Us: Emotion by Design. MIT Press, London.
JEROLMACK, C (2009) Humans, Animals, and Play: Theorizing Interaction When Intersubjectivity is Problematic. *Sociological Theory* **27(4)**, 371-389. doi: 10.1111/j.1467-9558.2009.01353.x.
KARK, R (2011) Games Managers Play: Play as a Form of Leadership Development. *Academy of Management Learning & Education* **10(3)**, 507-527. doi: 10.5465/amle.2010.0048.
KIM, T W and WERBACH, K (2016) More than just a game: ethical issues in gamification. *Ethics and Information Technology* **18(2)**, 157-173. doi: 10.1007/s10676-016-9401-5.
KIRBY, C C and GRAHAM, B (2016) Gadamer, Dewey, and the importance of play in philosophical inquiry. *Reason Papers* **38(1)**, 8-21. https://reasonpapers.com/archives/
KLEIN, H K and MYERS, M D (1999) A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly* **23(1)**, 67-94. doi: 10.2307/249410.
KOLB, A Y and KOLB, D A (2010) Learning to play, playing to learn: A case study of a ludic learning space. *Journal of Organizational Change Management* **23(1)**, 26-50. doi: 10.1108/09534811011017199.

KOZINETS, R V, SHERRY, J F, STORM, D, DUHACHEK, A, NUTTAVUTHISIT, K and DEBERRY-SPENCE, B (2004) Ludic Agency and Retail Spectacle. *Journal of Consumer Research* **31(3)**, 658-672. doi: 10.1086/425101.

KÜCHLER, T (1994) Postmodern Gaming: Heidegger, Duchamp, Derrida. P. Lang, New York.

KURKOVSKY, S (2015) Teaching Software Engineering with LEGO Serious Play In Proceedings of Proceedings of the 2015 ACM Conference on Innovation and Technology in Computer Science Education. ACM, 2742604, pp. 213-218.

LEFEBVRE, H (2003) The Inventory. In *Key writings*. (Elden, S., Lebas, E., and Kofman, E. (eds)), Continuum, New York, pp. 166-176.

LEVINA, N and ARRIAGA, M (2014) Distinction and Status Production on User-Generated Content Platforms: Using Bourdieu's Theory of Cultural Production to Understand Social Dynamics in Online Fields. *Information Systems Research* **25(3)**, 468-488. doi: 10.1287/isre.2014.0535.

LEVY, A K, WOLFGANG, C H and KOORLAND, M A (1992) Sociodramatic play as a method for enhancing the language performance of kindergarten age students. *Early Childhood Research Quarterly* **7(2)**, 245-262. doi: 10.1016/0885-2006(92)90007-L.

LEVY, S (2011) In The Plex: How Google Thinks, Works, and Shapes Our Lives. Simon & Schuster, New York.

LIU, D, LI, X and SANTHANAM, R (2013) Digital Games and Beyond: What Happens When Players Compete. *MIS Quarterly* **37(1)**, 111-124. doi: 10.25300/MISQ/2013/37.1.05.

LIU, D, SANTHANAM, R and WEBSTER, J (2017) Towards meaningful engagement: A framework for design and research of gamified information systems. *MIS Quarterly* **41(4)**, 1011-1034. doi: 10.25300/MISQ/2017/41.4.01.

MAINEMELIS, C (2001) When the Muse Takes It All: A Model for the Experience of Timelessness in Organizations. *Academy of Management Review* **26(4)**, 548-565. doi: 10.5465/amr.2001.5393891.

MAINEMELIS, C (2010) Stealing Fire: Creative Deviance in the Evolution of New Ideas. *Academy of Management Review* **35(4)**, 558-578. doi: 10.5465/amr.35.4.zok558.

MAINEMELIS, C and ALTMAN, Y (2010) Work and play: new twists on an old relationship. *Journal of Organizational Change Management* **23(1)**, 4-9. doi: 10.1108/jocm.2010.02323aaa.001.

MAINEMELIS, C and RONSON, S (2006) Ideas are Born in Fields of Play: Towards a Theory of Play and Creativity in Organizational Settings. *Research in Organizational Behavior* **27**, 81-131. doi: 10.1016/S0191-3085(06)27003-5.

MARCUS, G E (2009) Notes toward an ethnographic memoir of supervising graduate research through anthropology's decades of transformation. In *Fieldwork is Not what it Used to be: Learning Anthropology's Method in a Time of Transition*. (Faubion, J. D., and Marcus, G. E. (eds)), Cornell University Press, Ithaca, pp. 1-34.

MCKENNA, B and CHUGHTAI, H (2020) Resistance and Sexuality in Virtual Worlds: An LGBT Perspective. *Computers in Human Behavior* **105(106199)**, 1-11. doi: 10.1016/j.chb.2019.106199.

MEISIEK, S and HATCH, M J (2008) This is Work, This is Play: Artful Interventions and Identity Dynamics. In *The SAGE handbook of new approaches in management and organization*. (Barry, D., and Hansen, H. (eds)), SAGE, London, pp. 412-422.

MILLER, D (2005) Materiality. Duke University Press, Durham.

MILLER, E (2017) Building and Dwelling with Heidegger and LEGO® Toys. In *LEGO® and Philosophy*. (Irwin, W., and Cook, R. T. (eds)), John Wiley & Sons, London, pp. 79-87.

MYERS, M D (1997) Critical Ethnography in Information System. In *Information Systems and Qualitative Research*. (Lee, A. S., Liebenau, J., and Degross, J. I. (eds)), Springer, London, pp. 276-302.

MYERS, M D (1999) Investigating information systems with ethnographic research. *Communications of the AIS* **2(4es)**, 1-20. doi: 10.17705/1CAIS.00223.
MYERS, M D (2013) Qualitative Research in Business and Management. 2nd edn., SAGE, London.
MYERS, M D and NEWMAN, M (2007) The qualitative interview in IS research: Examining the craft. *Information and Organization* **17(1)**, 2-26. doi: 10.1016/j.infoandorg.2006.11.001.
PETELCZYC, C A, CAPEZIO, A, WANG, L, RESTUBOG, S L D and AQUINO, K (2017) Play at Work: An Integrative Review and Agenda for Future Research. *Journal of Management* **44(1)**, 161-190. doi: 10.1177/0149206317731519.
REEVES, B and READ, J L (2009) Total engagement: How games and virtual worlds are changing the way people work and businesses compete. Harvard Business Press, Boston.
ROBERTS, D (2016) World of Workcraft: Rediscovering Motivation and Engagement in the Digital Workplace. Routledge, London.
ROOS, J, VICTOR, B and STATLER, M (2004) Playing seriously with strategy. *Long Range Planning* **37(6)**, 549-568. doi: 10.1016/j.lrp.2004.09.005.
RYALL, E, RUSSELL, W and MACLEAN, M (eds) (2013) *The philosophy of play*. Routledge, Oxon.
SALOVAARA, P and STATLER, M (2019) Always already playing: hermeneutics and the gamification of existence. *Journal of Management Inquiry* **28(2)**, 149-152. doi: 10.1177/1056492618792185.
SANDBERG, J and TSOUKAS, H (2011) Grasping the logic of practice: Theorizing through practical rationality. *Academy of Management Review* **36(2)**, 338-360. doi: 10.5465/amr.2009.0183.
SANTHANAM, R, LIU, D and SHEN, W-C M (2016) Research Note—Gamification of Technology-Mediated Training: Not All Competitions Are the Same. *Information Systems Research* **27(2)**, 453-465. doi: 10.1287/isre.2016.0630.
SCHMIDT, E, ROSENBERG, J and EAGLE, A (2017) How Google Works. rev edn., John Murray.
SCHOLZ, T (2013) Digital Labor: The Internet as Playground and Factory. Taylor & Francis, New York.
SCHOUTEN, J W and MCALEXANDER, J H (1995) Subcultures of Consumption: An Ethnography of the New Bikers. *Journal of Consumer Research* **22(1)**, 43-61. doi: 10.1086/209434.
SCHWARTZMAN, H B (1979) Transformations: The Anthropology of Children's Play. Springer, Boston, MA.
SICART, M (2014a) Play Matters. MIT Press, Cambridge.
SICART, M (2014b) Playing the good life: Gamification and ethics. In *The gameful world: Approaches, issues, applications*. (Walz, S. P., and Deterding, S. (eds)), MIT Press, Cambridge, pp. 225-244.
SICART, M (2018) Play in the Information Age. *Philosophy & Technology* **32(3)**, 517-534. doi: 10.1007/s13347-018-0311-9.
SMITH, R (2012) How Play and Games Transform the Culture of Work. *American Journal of Play* **5(1)**. doi: 10.1145/2858036.2858395.
SØRENSEN, B M and SPOELSTRA, S (2012) Play at work: continuation, intervention and usurpation. *Organization* **19(1)**, 81-97. doi: 10.1177/1350508411407369.
STARBUCK, W H and WEBSTER, J (1991) When is play productive? *Accounting, Management and Information Technologies* **1(1)**, 71-90. doi: 10.1016/0959-8022(91)90013-5.
STATLER, M, HERACLEOUS, L and JACOBS, C D (2011) Serious Play as a Practice of Paradox. *The Journal of Applied Behavioral Science* **47(2)**, 236-256. doi: 10.1177/0021886311398453.

STATLER, M, ROOS, J and VICTOR, B (2009) Ain't Misbehavin': Taking Play Seriously in Organizations. *Journal of Change Management* **9(1)**, 87-107. doi: 10.1080/14697010902727252.

STURGES, J (2013) A matter of time: young professionals' experiences of long work hours. *Work Employment and Society* **27(2)**, 343-359. doi: 10.1177/0950017012460318.

SUTTON-SMITH, B (1997) The ambiguity of play. Harvard University Press, Cambridge, MA.

TAKHVAR, M (1988) Play and theories of play: A review of the literature. *Early Child Development and Care* **39(1)**, 221-244. doi: 10.1080/0300443880390117.

TÖKKÄRI, V (2015) Organizational play: within and beyond managing. *Qualitative Research in Organizations and Management* **10(2)**, 86-104. doi: 10.1108/QROM-11-2013-1181.

TURKLE, S (2017) Life on the Screen. 3rd edn., Simon & Schuster, New York.

TURNER, V W (1982) From ritual to theatre: the human seriousness of play. Performing Arts Journal Publications, New York.

VAAST, E (2007) Playing with masks: Fragmentation and continuity in the presentation of self in an occupational online forum. *Information Technology & People* **20(4)**, 334-351. doi: 10.1108/09593840710839789.

VAN AMSTEL, F M C and GARDE, J A (2016) The Transformative Potential of Game Spatiality in Service Design. *Simulation & gaming* **47(5)**, 628-650. doi: 10.1177/1046878116635921.

VAN MAANEN, J (1995) Crossroads Style as Theory. *Organization Science* **6(1)**, 133-143. doi: 10.1287/orsc.6.1.133.

VAN MAANEN, J (2011) Ethnography as Work: Some Rules of Engagement. *Journal of Management Studies* **48(1)**, 218-234. doi: 10.1111/j.1467-6486.2010.00980.x.

VAN VLEET, M and FEENEY, B C (2015) Young at Heart: A Perspective for Advancing Research on Play in Adulthood. *Perspectives on Psychological Science* **10(5)**, 639-45. doi: 10.1177/1745691615596789.

WEBSTER, J and MARTOCCHIO, J J (1992) Microcomputer Playfulness: Development of a Measure with Workplace Implications. *MIS Quarterly* **16(2)**, 201-226. doi: 10.2307/249576.

WEBSTER, J and MARTOCCHIO, J J (1993) Turning Work into Play: Implications for Microcomputer Software Training. *Journal of Management* **19(1)**, 127-146. doi: 10.1177/014920639301900109.

WEST, S E (2014) Play as a facilitator of organizational creativity. In *Creativity research: An inter-disciplinary and multi-disciplinary research handbook*. (Shiu, E. (ed)), Routledge, New York, pp. 191-206.

WEST, S E, HOFF, E and CARLSSON, I (2016) Play and Productivity. *American Journal of Play* **9(1)**. https://www.journalofplay.org/issues/9/1

YARNAL, C and QIAN, X (2011) Older-Adult Playfulness. *American Journal of Play* **4(1)**, 52-79. https://www.journalofplay.org/issues/4/1

Figure 1 "Matt" on the Playing Field

215x161mm (96 x 96 DPI)

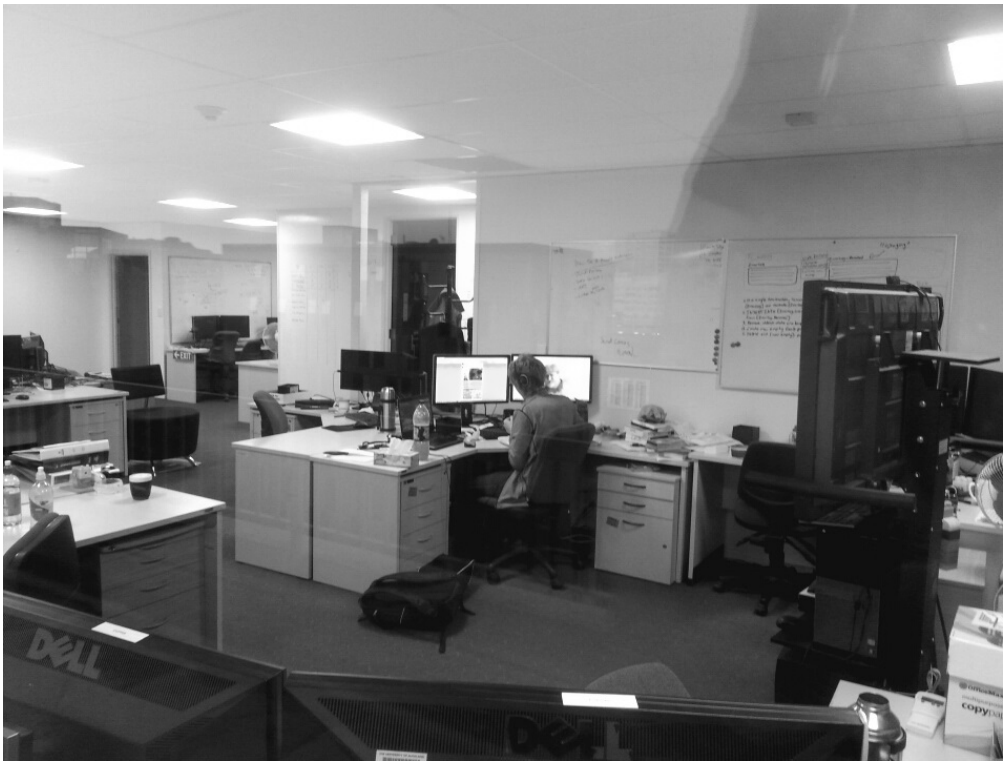

Figure 2 The "Playing" Field

251x190mm (96 x 96 DPI)

Figure 3 Matt's workplace

215x161mm (96 x 96 DPI)

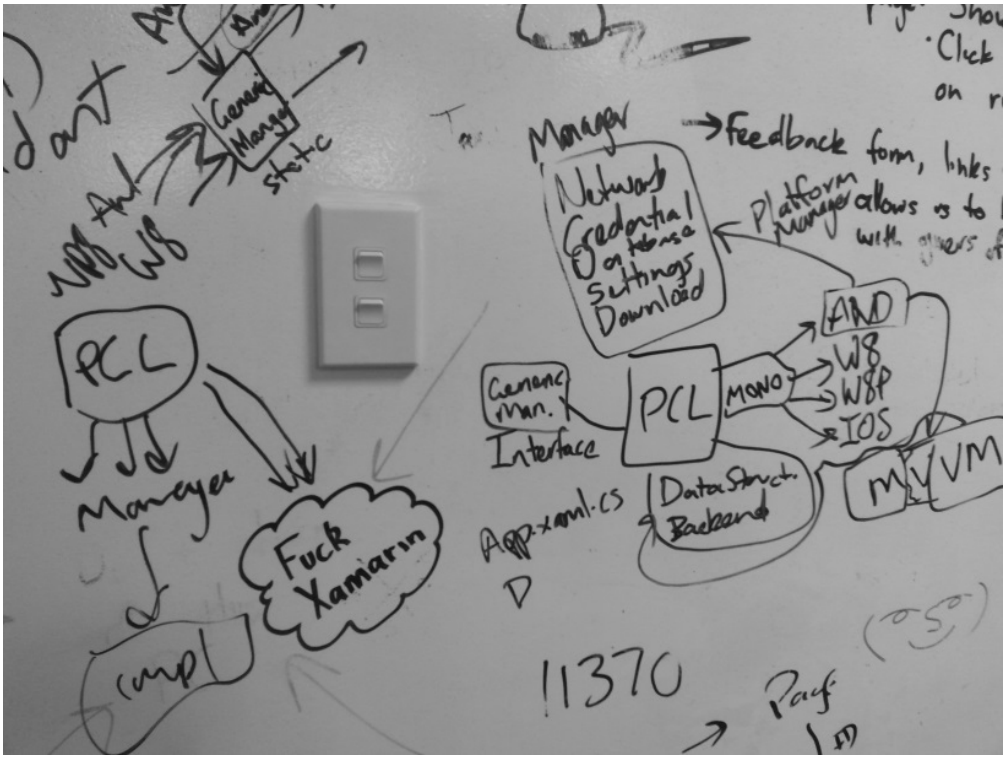

Figure 4 When players reject a plaything

215x161mm (96 x 96 DPI)