

## Games People Play: Social Media and Recruitment

### (Research in Progress)

Kristine Dery  
Center for Information Systems Research  
MIT Sloan School of Management  
Cambridge, Massachusetts  
Email: kdery@mit.edu

Carole Tansley  
Nottingham Business School  
Nottingham Trent University  
Nottingham, United Kingdom  
Email: carole.tansley@ntu.ac.uk

Ella Hafermalz  
Discipline of Business Information Systems  
University of Sydney  
Sydney, New South Wales  
Email: ella.hafermalz@sydney.edu.au

#### Abstract

*Gamification in organisations is not new and is typically used to modify the behaviours and practices of employees to deliver organizational value. Recent developments in digital technologies have, however, enabled new possibilities for gamified processes to be more interactive, mobile and complex. In this paper we examine the graduate recruitment process of a large professional services firm. We apply actor-network theory to explore the way applicants engage with the technology and each other to both compete and co-operate as they attempt to understand the recruitment process to position themselves more favourably in the quest for a graduate role. We find that the lens of ‘a game’ is very useful to understand the practices of applicants and posit that gamification potentially offers new ways to re-imagine processes such as graduate recruitment to deliver better organizational outcomes.*

#### Keywords

gamification, social media, graduate recruitment, actor-network theory, sociomateriality

#### INTRODUCTION

As often happens, research programs that set out to study one set of questions inadvertently stumble upon something quite unexpected. And so it was with this project. We began with an interest in the impact of social recruitment on graduate recruitment<sup>1</sup> and diverted into new research waters around gamification. Much in the same way as games take players to junctures and invite them to explore unpredictable opportunities, we too followed the white rabbit down the rabbit-hole and discovered networks of actors engaging with social media as they attempted to better understand the graduate recruitment process and ways to increase their chances of success. In this way we came to understand the process of graduate recruitment as an unintended game and, with that increased understanding, open up new possibilities for re-imagining the process and engaging applicants in new and more effective ways.

---

<sup>1</sup> A broader research study looking at the impact of social media on recruitment funded by the Australian Research Council (ARC) that includes researchers from MIT Sloan School of Management, University of New South Wales and the University of Sydney.

Gamification has been defined as the act of applying game mechanics in a traditionally non-game context (Deterding et al. 2011; Paharia 2013; Zichermann and Linder 2013) such as business. It is derived from behavioral economics (Paharia 2013) and has been predominantly adopted by practitioners and consultants as a motivational tool (Paharia 2013; Zichermann and Linder 2013). McGonigal (2011) lists the four defining mechanics of all games as being a goal, rules, a feedback system, and voluntary participation, with common features of contemporary games also including interactivity, graphics, narrative, rewards, competition, virtual environments and the idea of 'winning'. Designers typically gamify a system by purposefully re-engineering an existing system using game mechanics to bring about desired behavioral change. Digital technologies in general and social media specifically have provided new platforms to enable businesses to apply the principles of games to impact practices in the workplace across all stakeholders. In this paper we utilize this recently popularized notion of gamification as an analytical lens to study the intersection of two phenomena: graduate recruitment and selection processes, and the use of social media tools by graduates who are applying for graduate positions.

Graduate recruitment processes play an important role in the talent management practices of most large organisations as they seek to attract new talent into their graduate training programs in the hope that these young minds will be their future leaders. Companies, such as the one studied in this study, typically have around 11-12,000 applicants for around 4-500 graduate positions. Thus the importance of attracting the best talent in a very competitive environment and then effectively recruiting them is: complex, labor intensive, high cost, and often fails to deliver. The process is highly competitive, particularly for the larger programs in professional services and the finance industries, as companies vie for the attentions and commitments of the best graduates. In recent times this competitive activity has meant that companies are recruiting increasingly early with offers often being made to students in their first or second years of undergraduate study. Brand reputation, attraction processes and engagement activities are all critical to attracting the right applicants, select those most likely to succeed in the organisation, and finally maintain their attention and commitment through to physical on-boarding. Social media platforms are well placed to deliver these capabilities and so it is no surprise that graduate recruitment processes have embraced networking platforms such as Facebook, LinkedIn, and Twitter, together with crowdsourcing forums such as Whirlpool. These online environments are used to provide the candidate with added insights into the organisation through dialogue between both candidates and current employees, as well as further opportunities for the employer to gain added perspectives to facilitate their selection process.

However, despite the plethora of new options available through social media, companies continue to report similar challenges with poor graduate retention rates and a tendency toward "corporate cloning". It would also appear that there has been limited structural change to the process and companies appear to be largely using social media to augment existing practices. Overall it seems that there is little evidence of the use of digital technologies to redefine the engagement with prospective talent. This research study was therefore designed to focus on three key questions: (1) how is social media being used in the graduate recruitment and selection process, (2) how might companies redefine and reconstruct the process to potentially achieve better results for the organisation and (3) how can we re-position gamification as a lens rather than a process in itself to provide a new view of an existing process. We posit that the graduate recruitment process has long resembled a game with explicit and implicit sets of rules but that social media has provided new dimensions to the game that, if well understood and managed, have the potential to redefine the process and add new opportunities for value.

In this study we examine a case study of the graduate recruitment process in a global professional services firm (known here as Consultex) with a focus on the use of social media. In particular we focus on the applicant activity in Whirlpool (an informal, open, crowd-sourced platform) where students engage to co-create new ways of understanding the success criteria for succeeding in a job offer with Consultex. It is in this forum that we observe evidence of both co-operative and competitive activities as participants engage with networks to gain more informed insights into a complex recruitment process. Candidates appear to be reframing the recruitment process with all the attributes of a game, with the Whirlpool forum providing the opportunity to work together in forums much in the same way that they would play online games in other recreational contexts. The entanglement of both the social (the actors) and the material (the technological artifacts) through the narratives and choice of medium is instrumental to the gamifying of the process. We draw on Orlikowski and Scott's (2008) work on sociomateriality to examine the assemblages of actors and objects as they form practices to compete and co-operate. Sociomateriality is a useful approach in the context of this work and we have applied it as an umbrella term within which actor-network theory (ANT) resides as a lens to take a more detailed look at the way in which new practices are formulated (Dery et al. 2013). ANT identifies four phases of actor-network formulation all of which are evident and influential in this study: problematization, interessement, enrollment and mobilization (Callon 1986). This paper examines the way in which applicants gamify the graduate recruitment process as they pass through these phases and argues that there are implications for organisations in re-thinking the way in which digital technologies can be used to re-imagine the graduate recruitment process to achieve better organizational outcomes.

We firstly take a closer look at the components of gamification, social media and recruitment, and then discuss some new perspectives using ANT to get a clearer lens into our observations. Finally we propose some insights for practitioners and further research directions for academics.

## **Gamification**

Today, games explicitly developed to educate, train and inform the world's students, employees and trainees carry the title serious games (Michael and Chen 2006). Serious games are usually digital and are defined as games 'in which education (in its various forms) is the primary goal, rather than entertainment' (Michael and Chen 2006). Criticism of serious games generally comes from those who see 'education' and 'entertainment' to be in conflict with one another, while Michael and Chen (2006) believe that there is significant overlap that can be made use of in well-designed digital games. The difference between serious games and gamification is not clear-cut (Deterding et al. 2011). Some serious games involve gamification, for example, when a professional training module has been transformed into an online game using a range of the game mechanics described earlier. Deterding et al. (2011) list a host of other terms that are related to gamification, including productivity games, surveillance entertainment, behavioral games, game layer, applied gaming, funware and playful design. Gamification is nevertheless the term that has found traction in industry since 2010 and has 'managed to institutionalize itself as the common household term' (Deterding et al. 2011).

Critics are quick to point out that gamification is not entirely new – rewards systems have been in place in businesses for decades in the form of air points and loyalty programs (Paharia 2013) and serious games have been used for training and education since digital games were popularized in the late twentieth century (Michael and Chen 2006). Others disapprove of gamification from an ethical perspective, primarily because it has become synonymous with rewards and operant conditioning (Nicholson Forthcoming). In particular, the use of game mechanics, badges and leaderboards as gamification mechanisms that reward work with digital badges, has led to digital gamification tools being referred to colloquially as 'exploitationware' (Deterding et al. 2011). The roles of 'fun' and 'play' in gamification are also contested. Whilst gamification is sometimes disparaged as being little more than 'funification' (Phillips 2014), the notion of 'engagement' takes precedence over the word 'fun' in most gamification writing. While fun is a potential by-product of engaging with a game, in most cases it is not considered to be the primary objective. Further definitional disputes surround the difference between 'play' and 'game'. The general consensus here is that games are a form of play, distinguished by a game's organization around goals, structure and rules (Nicholson Forthcoming; Zimmerman and Tekinbaş 2004). Even the idea of 'rules' is not straightforward. Zimmerman and Tekinbaş (2004) discern three kinds of rules: operational rules (the written guidelines), constitutive rules (the logical formal structures that underpin the game), and implicit rules (the unwritten rules of 'proper' behavior that are socially determined and therefore context specific). For a game to be effective, an understanding and appreciation of these rule layers is required.

For McGonigal (2011) sociability and community are optional features of the game structure and are only peripheral enhancers of the core game mechanics. For others (Jagoda 2013; Paharia 2013; Zichermann and Linder 2013), social interaction is a more fundamental component of games that is centrally important to gamification. Paharia (1992) aligns the relevance and potential of gamification with the prevalence of social media, combined with the advent of big data (and its related concept of the 'quantified self'), arguing that if we can meaningfully communicate data gathered on performance by organizing it into a game-like system that utilizes social media, employees can be empowered to collaborate and compete with their networks to better achieve individual and collective goals.

## **Graduate Recruitment and Social Media**

There has been little research dedicated to the graduate recruitment process, with most research in this area focusing on skills education (James et al. 2013) or social and economic issues such as diversity or job market factors (Claus Wehner et al. 2012; Montalvo 2013). There is even less research published around graduate recruitment and technology. Typically scholars who have examined the recruitment process in the broader context of HRIS research have focused largely on usage (e.g. Chapman and Webster 2003) or at a transactional level of online application, analysis and grouping of CVs predominantly focused on workflow systems. While these insights into IS and recruitment more broadly are useful to inform our thinking, there are some unique features of graduate recruitment and also of social media that are worth consideration. Millennial graduates (born between 1982 and 2003) are highly technologically connected, and this development has begun to influence graduate recruitment and selection practices. The importance of information systems in graduate recruitment is emphasized by the findings of Parry and Tyson (2008) in their examination of online recruitment. They suggest that the use of online recruitment may be more characteristic of graduate recruitment rather than experienced-hire recruitment due to the graduate demographics' familiarity with online systems through their generational socialisation with technology (Parry and Tyson 2008). There is, however, little available research that

specifically addresses how graduates engage with social media in the recruitment and selection process (though for examples see Dery and Gaveston 2013; Dery et al. 2014).

The 'new class of information technologies' known as social media 'support interpersonal communication and collaboration using Internet-based platforms' (Kane et al. 2014). While the use of platforms such as Twitter, Facebook, and LinkedIn has proliferated in recent years, the impact of these platforms on businesses and strategy is not well understood (Kane et al. 2014). There has been a significant body of IS research dedicated to investigating such impacts, however this research is mostly empirically driven and the body of published knowledge has been labelled 'unstructured' in a recent review by Ahmed et al. (2014). We concur with Ahmed et al. (2014) in adopting the definition of social media put forward by Kaplan and Haenlein (2010), which states that: 'Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.' User Generated Content (UGC) is further defined (following the OECD, 2007) as fulfilling the basic requirements of being published on a publically accessible website or social networking site, showing a certain amount of creative effort, and having been created 'outside of professional routines and practices' (Kaplan and Haenlein 2010).

By using the media richness model and Goffman's theories of social interaction, Kaplan and Haenlein (2010) classify different types of social media according to their social presence/media richness and self-presentation/self-disclosure. On their scale, traditional social networking sites such as Facebook, Twitter and LinkedIn rate highly on self-presentation/self-disclosure and 'medium' for social presence/media richness. Harder to place in the matrix is the web forum 'Whirlpool'. Kaplan and Haenlein (2010) describe a social networking site as 'applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other'. This description of common practice does not precisely describe the features and use of Whirlpool, which instead hosts mainly anonymous users with limited profile information who make their presence known only when they post a comment on a sub-forum. The 'follow' function of many social networking sites is not applicable in the Whirlpool community. Whirlpool does not however fit neatly in the other categories proposed by Kaplan and Haenlein (2010), whose remaining categorisations are blogs, collaborative projects, content communities, virtual social worlds, or virtual game worlds. This limitation can potentially be attributed to categorising social media sites in terms of their features, as if the richness of the medium and the capacity for self-presentation and self-disclosure determines the use of the platform, rather than researching the user practices that have emerged from and converge on these web 2.0 platforms.

By taking an actor-network theory (ANT) approach, we are able to look beyond trying to categorise Whirlpool by looking at its features and role as a web forum with basic information sharing functionalities. ANT affords us new ways of researching and theorising the significance of this social networking site in the practice of graduate recruitment and how networks both compete and collaborate by framing the process within the principles of a game. We can consider how these two practices intersect, are brought into conflict (Nicolini 2012), and generate new understandings as human and non-human actors entangle to develop new practices. Thus understanding of 'gamification' as a practice can occur within a system through user interaction.

## METHODOLOGY

This is an exploratory study examining a very established process, graduate recruitment and selection, using a new lens, gamification. As such, we are interested in understanding how the users interact with social media as they try to make sense of the "rules of the game". There is a basic premise that those who can understand and enact these rules to meet the expectations of the recruiters will advance to the next phase and thus progressively draw closer to the final prize – full time employment in a graduate role. To gain these insights we need to understand the organizational context, the broader employment context for graduates, the process itself, and the ways in which social media are used to engage with this process. Thus we have chosen to focus on a single case study to take a deeper dive into the data including: semi-structured interviews with HR Directors and those responsible for Graduate Recruitment (5 x 1 hour interviews), interviews with Consultex applicants (6 x 30-40 minute interviews), text analysis of online forums and social media, publically available websites and documentation.

This data was gathered over nine months (the typical graduate recruitment period), analyzing the social media activity on Twitter, Facebook, Yammer, LinkedIn, and Whirlpool and then used to map the graduate recruitment process including all the social media applications (see figure 1). The diagrammatic representation of the process helped us to see the 'funnel' structure and how Consultex used a series of tasks to eliminate and select applicants. Once mapped, the basic structure of this process struck us as being reminiscent of a 'quest' game, in which each 'level' becomes progressively harder as the player battles opponents, performs missions and solves puzzles in pursuit of a final prize. The process of diagrammatic mapping is a rich tool to enable new insights into practices surrounding complex processes. This formed the basis of the study which enabled us to consider the social media

activity pertaining to Consultex’s graduate program holistically, and thereby were sensitized to the practices of users of these social media platforms – in particular the web forum site ‘Whirlpool’.

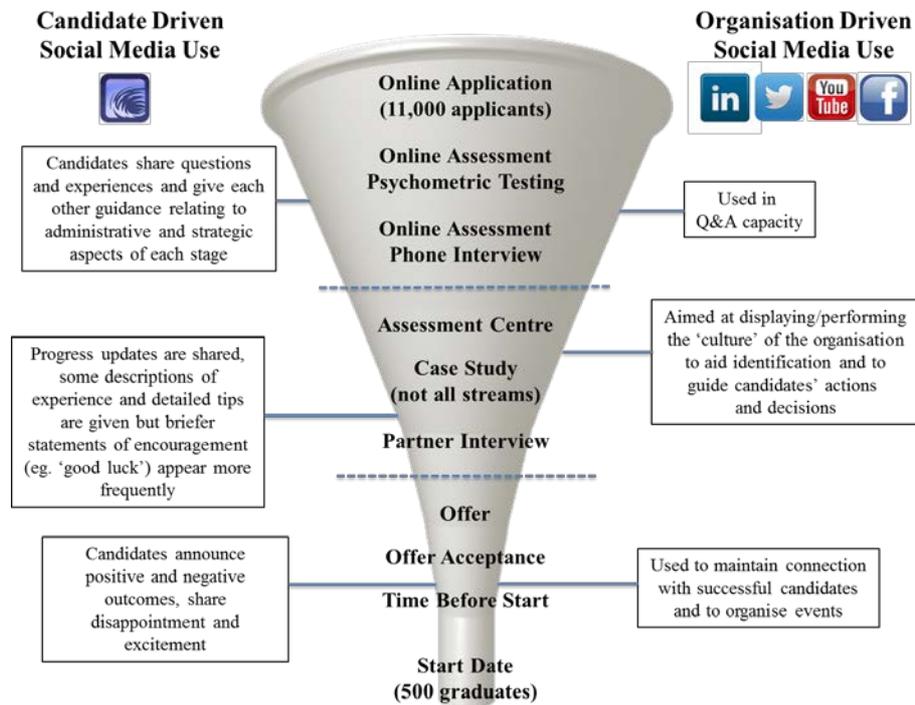


Figure 1. Social Media and the Graduate Recruitment & Selection Funnel at Consultex  
(based on Dery and Gaveston 2013)

The decision to employ a gamification lens arose through this abductive process (Klag and Langley 2013). Data gathered during the initial observation period was mapped and found to show similarities with a game-like structure. By considering the graduate recruitment process with a gamification lens, we were prompted to investigate the role of social media platforms from a practice perspective to see how users were interacting with the graduate recruitment process as *if it were a game*. We here consider how graduate recruitment practices *intersect* and *compete* with Whirlpool users’ social media practices to co-create gamification practices as an ‘on-going accomplishment’ (Halkier and Jensen 2011) enacted in socially constructed online communities.

### CASE STUDY: CONSULTEX

In this study we joined forces with one of the largest global professional services firms (known for the purposes of this paper as Consultex) to try to understand more about how the process of finding and recruiting graduate talent was being impacted by social media, and to identify opportunities to manage these processes more effectively for better quality outcomes. The ability to attract and retain top graduate talent is a source of sustainable competitive advantage for these firms. Large income accounts are won and retained through the capabilities of the professional service firm to offer a wide range of accounting, consulting and advisory services that leverage their talent to add value to clients. The graduate recruitment program is therefore seen as integral to renewing and growing Consultex talent. Each year an average of 11,000 hopeful graduates are reduced to 500 hires through a lengthy series of recruitment and selection phases. Not only is the process of finding and recruiting this talent expensive, it is also renowned for having a high wastage factor (over 50% of graduate recruits leave in the first two years of employment). Building capabilities to recruit and select talent more effectively therefore represents significant value to Consultex.

The demand and competition for 'top graduates' in Australia is high. A top candidate is seen as someone who is 'not only smart and able to learn quickly, but also...adaptable, responsible, and able to work with others' (Carless 2007). While the literature on recruitment and selection of high achieving candidates is well established, there is far less research pertaining specifically to graduates. This may be because the annual graduate intake of many organizations is relatively small, however, in the case study organization and other professional services firms

where graduate intakes can average at around 10% of the national workforce and are therefore of strategic significance. A key advantage of hiring graduates for Consultex, aside from their relatively low cost and high malleability, is this demographics' assumed technological aptitude, which is a skillset invaluable to Consultex's offering and today's organizational context (McLaughlin 1999; Picot et al. 2008; Stross 1996).

In researching how graduates are interacting with recruitment and selection processes, it is important to note the discrepancy between those constructing these systems and those who are navigating it. Today's graduate market consists mainly of millennials, a generational 'cohort' (Ryder 1965) that according to Strauss and Howe (1991) span in birth year from 1982-1986 (early millennials) and 1987-2003 (late millennial). While defining the characteristics of this generation is beyond the scope of this paper, millennials are elsewhere described as being optimists, cooperative, team players, trusting, accepting of authority, rule-followers, smart, civic-minded, special, sheltered, confident, achieving, pressured, and conventional (Kowske et al. 2010; Strauss and Howe 1991). These characteristics, while broad and necessarily the result of stereotyping, do support the initial finding of this research that graduates are using social media in a cooperative manner in teams to assist each other in working out the hidden rules of the case study organization's graduate recruitment and selection process, despite the end goal being a highly coveted and scarce position for which many of them are competing.

As high calibre graduates are in demand, firms such as Consultex need to be able to portray themselves as environments that appeal to these graduates as they consider many employment opportunities and often juggle multiple job offers. Figure 1 illustrates the recruitment process and the identified role for social media in Consultex's graduate recruitment and selection process that positioned digital platforms to "overlay all segments of the process" (Senior Recruitment Manager, Consultex). It was described by the HR Director as "not being a part of the process itself but rather a presence around the process". In this way social media didn't at first appear to disrupt the existing process but rather supporting and enhancing the graduate experience as they were filtered through it. However, further analysis of the data suggested that more fundamental shifts were occurring, that re-framed and re-defined this process as the applicants engaged with informal platforms (such as Whirlpool) to try to understand the system and gain traction within it.

In the initial phases of the recruitment process at Consultex, social media platforms Twitter and Facebook were used to augment the more traditional processes, to connect with potential candidates and to draw them to the website and the online application process. Face-to-face campus activities and general website updates enable potential graduates to engage with the primary stages of the recruitment process. This is typically the "fishing" phase where students may apply to many firms just to see who "bites". Social media was engaged to assist with Q&A activities and to generally provide information to assist with the application process and to prepare those graduates who progressed to online assessment and phone interviews. In this capacity social media was considered background to existing recruitment processes.

However, for those graduates who were invited through to the more advanced phases of selection (involving an assessment center, case study analysis and partner interviews), the social media activity began to re-frame the process. At these stages there was a significant increase in the official social media activity as graduates were connected to current employees in the areas of the business aligned with their stated interests; invited to engage with topics of interest to Consultex; and generally encouraged to participate in conversations designed to provide applicants with an authentic view into the organization. The organization's objectives of the use of social media to engage applicants at this stage was to (1) enable graduates to self-select out of the recruitment process if they recognized that they didn't fit with Consultex, (2) provide the graduates with the opportunity to be more Consultex-informed in order that the interview process might be further enhanced, and (3) commence the process of establishing networks with Consultex employees.

Social media was therefore used in this recruitment phase as a way of influencing the candidate to identify with the organization and to move beyond a one-way process of 'viewing' the organization to a more integrated dialogue designed to 'get to know' the people of Consultex. In this way a process of organizational identification (Ashforth et al. 2008) or co-created identity commenced and Consultex recruiters anticipated that applicants would be able to display more detailed knowledge about the company, and more importantly be able to engage in dialogue to "fit" with the Consultex terminology and framing of ideas and conversations. It is at this point in the process that discussions in Whirlpool begin to gain momentum and reveal a whole series of exchanges where prospective students were seen to be trying to understand the informal rules of what can be thought of as "the Consultex game".

Actor-network theory (ANT) becomes useful here as a lens through which to understand more about the process and how networks form and reform as they try to make sense of the recruitment process and how to succeed. ANT refers to this as *translation* and as Elbanna (2008) points out it is rare for networks to reach a stable form, rather they are more fluid as they form and reform around a problem. We draw on Callon's (1986) four stages: problematization, interestment, enrollment, and mobilization. As the process became more nuanced and complex

a series of networks began to form around the “problem” of how to succeed in the recruitment process. In keeping with Callon’s (1986) definition of problematization the networks are framed by the network initiator (Consultex Grad Recruitment) to get interested parties (potential graduates and current Consultex employees) together to engage with the problem. These networks are designed to exchange knowledge about the recruitment process and the organisation more broadly. However, as the applicants progress through the process these early, more contrived networks outlive their value and applicants begin to realize that there are additional layers of knowledge required to be successful.

At this point new networks begin to form as applicants shift from the Consultex managed platforms to interact with Whirlpool (an open forum) to engage with each other to decipher more of what was expected of them i.e. to understand more of the implicit ‘rules of the game’. The dialogue in the platform was convivial and supportive as the actors sought clarification and support from each other. Patterns of sociability and strategizing analogous to those found in online gaming communities (Ducheneaut et al. 2007) were evident at this stage. The nature of the challenges were becoming more explicit in the Whirlpool dialogue and interest building around combining skills to increase capabilities and developing a sense of community suggesting that the actor-network was shifting to *interessement* where the actors became more interested in working together to find solutions. Competing associations were cast aside at this point as actors realized that there was more to be gained by sharing knowledge. Discussions were less about fears and concerns around process, and more around shared solutions and understandings in much the same way as gamers gather in online communities to share their experiences, short-cuts, their re-creation and insights into those unwritten rules.

The *enrollment* phase of ANT is where actors assign roles and the network begins to take a more committed and potentially structured form. Many players of online games form small groups called ‘guilds’ to assist each other in completing specific missions within the game (Mortensen 2008). Typically more experienced players take the lead in these guilds in much the same way as previous applicants (successful and unsuccessful) began to take lead roles in the Whirlpool network answering questions and providing guidance through the various stages of the selection process. For example, the Whirlpool forum member ‘Pixie’ responded to several other users’ questions about the assessment day activities with helpful tips garnered from her own experience of the previous year’s selection process:

I didn't find that I had to present anything during the assessment day. Basically there is a manager and a HR rep sitting on your table and just assessing how well you interact with your group. You're meant to reach a group consensus and explain why but they just want to hear you speak amongst your peers and how well you listen to other people's ideas. I had friends that went through the assessment day and didn't get through despite their 85+ USYD combined law WAMs because they were not good listeners and dismissed others opinions/interrupted people as they were speaking. Make sure you open your mouth and make contributions as soon as someone finishes talking. Summarising what everyone has said also helps because it shows the assessors that you were listening and open minded to opinions.

Given that the purpose of the assessment day was to measure graduates’ skills and abilities against a pre-determined score sheet, this kind of peer-to-peer strategizing had the potential to assist candidates in manipulating their performance so that they positively matched the selection criteria. There were many similar tips and insights shared by the actors in the Whirlpool forum with an underlying sense that the final phases required knowledge of a series of hidden elements and the keys to unlock them. These ‘keys’ were shared within the network in a similar way to how ‘cheats’ are shared in game-related forums: interview questions listed, assessment activities such as case studies shared with tips for the best solutions, even the names of specific recruiters were shared in the forum so that applicants could accurately address their correspondence.

Failure was, however, swift and final. Applicants either remained in the process after each assessment or they were eliminated. Actor networks were subsequently reformed to adjust to revisions in the membership and the translation process recommenced. As the final stages of the ‘game’ were reached the network started to break down and the cooperation and sharing of advice tapered off. The number of actors was reduced and those remaining ceased to co-operate and instead began to work independently to compete with each other. At this point the network of actors dispersed and ceased to engage. This is distinct from Callon’s translation phase of ANT but, as Elbanna (2008) points out, not unusual for actor-networks. Given that all actors on Whirlpool were anonymous, they remained a network only long enough to complete the game, in much the same way as online gamers engage with their co-created networks. These are actor networks of convenience bounded by a series of events in a specified time.

## DISCUSSION AND CONCLUSIONS

Rather than thinking of graduate recruitment and selection as the streamlined process envisioned by Consultex's HR team – as one that sifts applicants between the phases to identify the best hires - we start to see a series of

more complex interactions between applicants as they engaged with a range of social media, particularly the web forum Whirlpool, to learn and then perform those behaviors that the recruitment process rewarded. We came to think about this as an actor-network where the technology and the human actors intertwined to engage in a series of translations to try to understand the explicit and implicit rules of the recruitment 'game'. Those who understood and could apply the more implicit rules and strategies, thus producing the required responses, got further and further along the levels of the game. As with all games of this nature, the stakes got higher as the game progressively became more complex and thus the role of the actor networks to make sense of the process became invaluable. However, unlike actor-networks in other spheres there came a point at which co-operation with the network was no longer rewarded and replaced by fierce competition for the prized graduate roles. At this point the actor-network broke down and the translation loop of forming and reforming was disrupted. This offers new insights to inform the future development of ANT in this area which will be explored in future iterations of this research.

Preliminary data from interviews with the case study organization's graduate recruitment team and with graduate applicants, as well as observation of their online presence, showed that Consultex's official social media accounts were used fairly innocuously, however we found that the web forum platform 'Whirlpool' was experiencing a high volume of post traffic in relation to the organization's graduate program. Analysis of the discussions on this forum suggested that the actors were engaging with the platform to re-frame the recruitment process as a game. Applying the same principles as they would to online gaming they were able to form a network to both co-operate and compete to increase their chances of playing the game as far as they could. This forum and others like it is now the focus of our research and will be used to develop our understanding of gamification further.

Viewing Whirlpool activity through the gamification lens provides a productive means of sensitizing us to a range of complex interactions. We introduce the notion of gamification as a prospective contribution to theory and future research perspectives. The key distinction that we are making here between our research and those of other gamification scholars is that the users (in this case the graduates) have the capacity to gamify a process by harnessing the game mechanics of sociability and community in order to cooperatively navigate such game features as leveling up through an accumulation of points in a competitive environment.

By thinking of graduates as 'playing' the recruitment and selection process as a game through a series of translations, we begin to see the interactions between the human and non-human actors as they form and reform around the challenges of the game until eventually competition takes over and the value of the network ceases to exist. Questions that interrogate the boundary between rules and practice abound. For example, is it 'deviant' to reveal the mysteries of the game while it is still being played? (for a discussion of deviance in gaming see Mortensen 2008). Why would an advanced player 'unlock' the level that they have just completed for the benefit of their rivals? Are the graduates on this forum cheating the system, or are they just crowd-sourcing a solution to a difficult puzzle? Can the game be harnessed in order to achieve a more sophisticated and improved selection outcome? Can it be extended beyond the selection phase to assist with talent management? By applying the gamification lens to the graduate recruitment and selection process we become sensitized to such questions and their associated potential for inspiring future research directions and practical applications.

This study is our first cut of this data and very much a research-in-progress paper. It raises more questions than answers at this stage but does offer some interesting insights for both practitioners and academics. Firstly, it suggests that there are benefits for practitioners to apply a gamification lens to graduate recruitment processes in an attempt to realize the benefits of a more diverse and committed intake of graduates. Secondly, we believe that there are more nuanced ways of thinking about gamification and in particular we challenge the notion that gamified processes are solely the product of the process architect. Rather we posit that there is value in considering the co-creation of gamification in a business context as users interact with digital platforms to find new ways of understanding and engaging with complex processes such as recruitment. Thirdly, we feel that the ANT lens provides a valuable perspective and that the gamification environment may provide new insights into the entanglement of human and non-human actors in ways that furthers the development of the theory to be of increased value in a digital environment.

## LIMITATIONS AND FUTURE RESEARCH

This study represents the first case study in a larger project but has provided us with some valuable insights into both the use of social media in graduate recruitment and our understanding of gamification. Increasingly firms are calling for more insights into how gamification can add value in a digitally connected world and this research provides us with new directions to explore. Further case studies are needed to extend this work into other organizational settings to explore many of the unanswered questions that this work raises. Additionally the study raises more questions about the effectiveness of graduate recruitment and selection processes and the potential role for social media to re-imagine those processes, to informate rather than simply automate (Zuboff 1988).

Further empirical qualitative and quantitative studies that examine these processes have the potential to add significant organizational value and opportunities for HR professionals to manage graduate talent more effectively.

- Ahmed, A., Scheepers, H., and Stockdale, R. 2014. "Social Media Research: A Review of Academic Research and Future Research Directions," *Pacific Asia Journal of the Association for Information Systems* (6:1), p. 3.
- Ashforth, B.E., Harrison, S.H., and Corley, K.G. 2008. "Identification in Organizations: An Examination of Four Fundamental Questions," *Journal of Management* (34:3), pp. 325-374.
- Callon, M. 1986. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of Saint Briec Bay," in *Power, Action and Belief: A New Sociology of Knowledge?*, J. Law (ed.). London: Routledge and Kegan Paul, pp. 196-233.
- Carless, S.A. 2007. "Graduate Recruitment and Selection in Australia," *International Journal of Selection and Assessment* (15:2), pp. 153-166.
- Chapman, D.S., and Webster, J. 2003. "The Use of Technologies in the Recruiting, Screening, and Selection Processes for Job Candidates," *International Journal of Selection and Assessment* (11:2 - 3), pp. 113-120.
- Claus Wehner, M., Giardini, A., and Kabst, R. 2012. "Graduates' Reactions to Recruitment Process Outsourcing: A Scenario - Based Study," *Human Resource Management* (51:4), pp. 601-623.
- Dery, K., and Gaveston, S. 2013. "The Impact of Social Media on the Selection and Recruitment of Graduates," in: *HR Technology Toolkit*. HRzone.com, pp. 29-32.
- Dery, K., Hall, R., Wailes, N., and Wiblen, S. 2013. "Lost in Translation? An Actor-Network Approach to Hris Implementation," *The Journal of Strategic Information Systems* (22:3), pp. 225-237.
- Dery, K., Tansley, C., and Hafermalz, E. 2014. "Hiring in the Age of Social Media: New Rules, New Game," *University of Auckland Business Review* (Spring).
- Deterding, S., Dixon, D., Khaled, R., and Nacke, L. 2011. "From Game Design Elements to Gamefulness : Defining "Gamification", " *MindTrek*, Tampere, Finland, pp. 9-15.
- Ducheneaut, N., Moore, R.J., and Nickell, E. 2007. "Virtual "Third Places": A Case Study of Sociability in Massively Multiplayer Games," *Computer Supported Cooperative Work: The Journal of Collaborative Computing* (16:2), pp. 129-166.
- Elbanna, A.R. 2008. "Strategic Systems Implementation: Diffusion through Drift," *Journal of Information Technology* (23:2), pp. 89-96.
- Halkier, B., and Jensen, I. 2011. "Methodological Challenges in Using Practice Theory in Consumption Research. Examples from a Study on Handling Nutritional Contestations of Food Consumption," *Journal of Consumer Culture* (11:1), pp. 101-123.
- Jagoda, P. 2013. "Gamification and Other Forms of Play," *Boundary 2* (40:2), pp. 113--144.
- James, S., Warhurst, C., Tholen, G., and Commander, J. 2013. "What We Know and What We Need to Know About Graduate Skills," *Work, employment & society* (27:6), pp. 952-963.
- Kane, G.C., Alavi, M., Labianca, G., and Borgatti, S.P. 2014. "What's Different About Social Media Networks?: A Framework and Research Agenda," *Management information systems* (38:1), pp. 275-304.
- Kaplan, A.M., and Haenlein, M. 2010. "Users of the World, Unite! The Challenges and Opportunities of Social Media." Greenwich: Elsevier Inc, pp. 59-68.
- Klag, M., and Langley, A. 2013. "Approaching the Conceptual Leap in Qualitative Research," *International journal of management reviews* (15:2), pp. 149-166.
- Kowske, B.J., Rasch, R., and Wiley, J. 2010. "Millennials," *Journal of Business and Psychology* (25:2), p. 265.
- Mael, F.a.A.B.E. 1992. "Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification," *Journal of Organizational Behavior* (13:2), pp. 103--123.
- McGonigal, J. 2011. *Reality Is Broken: Why Games Make Us Better and How They Can Change the World*. London: Jonathan Cape.
- McLaughlin, J. 1999. *Valuing Technology: Organisations, Culture, and Change*. London: Routledge.
- Michael, D., and Chen, S. 2006. *Serious Games: Games That Educate, Train and Inform*. Boston, Mass: Thomson Course Technology.
- Montalvo, E.J. 2013. "The Recruitment and Retention of Hispanic Undergraduate Students in Public Universities in the United States, 2000-2006," *Journal of Hispanic Higher Education* (12:3), pp. 237-255.
- Mortensen, T.E. 2008. "Humans Playing *World of Warcraft*: Or Deviant Strategies?," in *Digital Culture, Play, and Identity: A World of Warcraft Reader*, H.G. Cornelissen and J.W. Rettberg (eds.). Cambridge, Massachusetts: The MIT Press, pp. 203-225.
- Nicholson, S. Forthcoming. "A Recipe for Meaningful Gamification," in *Gamification in Education and Business*, L. Wood and T. Reiners (eds.). New York: Springer.
- Nicolini, D. 2012. *Practice Theory, Work, and Organization: An Introduction*. Oxford University Press.

- OECD. 2007. "Participative Web and User-Created Content: Web 2.0, Wikis, and Social Networking," O.f.E.C.-o.a. Development. (ed.). Paris.
- Paharia, R. 2013. *Loyalty 3.0: How to Revolutionize Customer and Employee Engagement with Big Data and Gamification*. McGraw-Hill.
- Parry, E., and Tyson, S. 2008. "An Analysis of the Use and Success of Online Recruitment Methods in the Uk," *Human Resource Management Journal* (18:3), pp. 257-274.
- Phillips, S. 2014. "Gamification or Funification?" *Research* Retrieved 01/03/2014, 2014, from <http://www.research-live.com/gamification-or-funification/?/4006207.blog>
- Picot, A., Reichwald, R., Wigand, R.T., and ebrary, I. 2008. *Information, Organization and Management*. Berlin: Springer.
- Ryder, N.B. 1965. "The Cohort as a Concept in the Study of Social Change," *American Sociological Review* (30:6), pp. 843-861.
- Strauss, W., and Howe, N. 1991. *Generations: The History of America's Future, 1584 to 2069*. New York: Morrow.
- Stross, R.E. 1996. "Microsoft's Big Advantage--Hiring Only the Supersmart." New York: Time Incorporated, p. 159.
- Zichermann, G., and Linder, J. 2013. *The Gamification Revolution: How Leaders Leverage Game Mechanics to Crush the Competition*. New York: McGraw Hill Education.
- Zimmerman, E., and Tekinbaş, K.S. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass: MIT Press.
- Zuboff, S. 1988. *In the Age of the Smart Machine: The Future of Work and Power*. Basic Books.

#### **ACKNOWLEDGEMENTS**

This research was supported by funding from the Australian Research Council.

#### **COPYRIGHT**

Kristine Dery, Carole Tansley & Ella Hafermalz © 2014. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.