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Employees' experiences and perceptions of work gamification

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EMPLOYEES' EXPERIENCES AND PERCEPTIONS

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Abstract

The purpose of this qualitative study was to examine the potential for implementing gamification at one worksite. Twenty employees in the organization were oriented to the concept of gamification and their perspectives, reactions to, and experiences related to gamification were gathered using an online survey. Study findings indicated that participants had some understanding of and exposure to gamification—especially as it concerned turning boring tasks into games and measuring and rewarding goal achievement. Although participants voiced some concerns, many were open to implementing gamification tactics at work and recommended implementing rewards, recognition, and rankings. Findings indicate that gamification programs, to be effective, need to be carefully designed to assure alignment with the organization. Continued research should involve the development of diagnostic tools for the purpose of enhancing alignment between an organization and gamification strategies, and conducting randomized controlled trials to better assess the effects of gamification on employee engagement.

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Chapter 1

Introduction

You look at the clock. Its 10:14 a.m.—time to switch over to work on your favorite project. You know the one. It's the project you can jump into with excitement, the project where the creative juices flow, and the rush of focus captures your mind. You're engaged, you're completely immersed, and then, Boom! It's noon. The last nearly 2 hours slipped by in the blink of an eye. You were in the zone, the flow. You were fully engaged.

After lunch is a different story. With all your favorite work out of the way, you have no choice but to deal with what's left. You grit your teeth, open the dreaded project, and start plugging away. Minutes feel like hours. You look at the clock: 1:05p.m.—a whole 5 minutes have flown by since you started working and already your mind is drifting to other places.

Let's face it: Even if we love our jobs, there are parts of it we don't particularly love. Certain tasks just don't appeal to us. Indeed, we're all responsible for at least some tasks we have difficulty immersing ourselves in. The trick may be to find a better way to get in the zone, to find that rhythm that makes even the mundane tasks more engaging— or at least, less painful to perform.

For many years, people have been playing games as a way of enjoying their free time. Within the last decade, the concept of *gamification* has emerged to refer to the practice of incorporating game-playing characteristics into day-to-day work to make it more enjoyable and engaging (Brigham, 2015; McCormick, 2013).

Increasingly, companies are finding innovative new ways to apply game-playing tactics at work to keep employees more focused and more engaged on work-related tasks

Orosco, 2014). For example, leader boards—which list employees according to their task performance—are used by many companies to provide visibility about key contributors across teams and organizations. Kronos, a company known for its Workforce Central suite, recently announced the incorporation of a new leaderboard feature designed to reward and recognize employees, managers, and teams for positive job performance and adhering to an organization's time and attendance policies and procedures (Berthiaume, 2014).

Examination of gamification from the lens of job design (Hackman, Oldham, Janson, & Purdy, 1975) reveals that the tactics and techniques of gamification both reflect the informative and immersive quality of game-playing that make activities and tasks seem fun and also reflect the characteristics of meaningful, engaging jobs (Brigham, 2015). In turn, applying gamification to work is anticipated to encourage and enhance individual performance and productivity (Orosco, 2014).

It follows that although gamification will not eliminate the particular work an employee does not dislike, gamification may help the employee increase his or her focus, productivity, and even enjoyment related to those activities. Despite the potential benefits of gamification, it remains a newer approach to work. Therefore, it is important to begin to understand employees' perspectives and ideas about the concept.

Purpose of the Study

The purpose of this study was to examine the potential for implementing gamification at one worksite for the purpose of enhancing employees' engagement in their work. Three research questions were examined:

1. What are participants' perceptions and experiences of gamification?
2. What are participants' levels of receptiveness to using gamification at work?

3.   What are participants' recommendations for implementing gamification?

Study Setting

The study organization (ABC) is a global nonprofit operating within the high technology sector. The organization employs 347 staff members across 30 countries. Offices are located in the North America, Europe, Asia, South America, and Africa. The organization utilizes a multi-stakeholder model wherein the public sector, the private sector, and technical experts are considered peers. The implication of this is that issues can be raised at a grassroots level and trickle upward to be considered by the board of directors.

Several of the staff members at ABC have used various forms of gamification in different aspects of work. At the time of this study, ABC had implemented JIVE software, a social collaboration tool often used by client organizations for the purpose of enhancing communication. JIVE software also offers a range of gamification features that organizations can opt to enable or disable. At the time of the present study, the organization had not enabled gamification, although ABC leaders were in the process of evaluating whether to do so. Importantly, ABC staff members were already heavily tasked; therefore, it was important to evaluate employees' perceptions and readiness for gamification before determining whether it should be implemented as an initiative.

Study Significance

Several studies have been conducted regarding the application of gaming principals for work (McCormick, 2013; Orosco, 2014). The present study adds to this body of literature by gathering employees' perceptions of and reactions to the concept. With this knowledge, particular gamification strategies can be tailored for particular groups of individual in an organization down to the job level. For example, although

competition is a common element of gamification, specific employees may not respond well to this. It follows that understanding employees' knowledge of, receptiveness to, and recommendations for gamification at their worksite is critical to effective implementation of gamification. These insights will be useful to the study organization and also may offer some insights to similar organizations that are contemplating the use of gamification.

Researcher Background

I grew up as part of the "joystick nation." I received my first video game console when I was very young and, up to this day, I have always been an avid gamer. I have always been astounded by how much time I could spend sitting and playing a game, in comparison to how long I could focus on a work task.

On a recent consulting project, I was helping an organization implement a new social collaboration platform named Jive. Although the organization's purpose was to use the tool to enhance communication, I soon learned that Jive also had gamification features that could be enabled, such as leveling-up, badges, leader boards, and more.

To me, it seemed obvious that gamification was here to stay and was going to make increasing impacts on our work. What intrigued me most was the idea of creating an immersive work environment by applying broader gamification tactics across more and more work tasks. I considered this particularly relevant to my work in learning and development, which often involves needing to train employees in content and skills that they may not naturally be interested in. I discovered through experience that turning training into games helped sustain learners' energy and attention throughout hours of lectures and system-based training.

Much earlier, I had also used gaming techniques in my work as a call center manager to motivate and engage staff. I created fun competitions among team members. I

used leader boards and team rankings to increase associate performance related to specific metrics. Although this was effective on the whole, I also found that some employees were not motivated by competition and still others were discouraged consistently finding themselves at the bottom of performance rankings.

Through these experiences, I recognize that successfully applying gaming tactics to work for the purpose of motivating and engaging staff requires more than creating games and competitions. My quest for broader understanding of gamification and how it applies to work motivated my interest in the present study topic.

Organization of the Study

This chapter provided the background for the study, including its purpose and study setting. The study significance and my background as the researcher also were discussed. Chapter 2 reviews literature relevant to the present study, including a discussion of employee engagement, gamification, and consideration of the impact of gamification on engagement. Chapter 3 describes the methods used to conduct the present study, including the research design, procedures for recruiting participants, participant presentation, and approaches for collecting and analyzing data.

Chapter 4 presents the results of the study for each research question. Chapter 5 offers a discussion of the findings, including conclusions, recommendations, limitations, and directions for future research.

Chapter 2

Literature Review

The purpose of this study was to examine the potential for implementing gamification at one worksite for the purpose of enhancing employees' engagement in their work. This chapter provides a review of relevant literature. Research on engagement is presented first, followed by a discussion of gamification and consideration of the impact of gamification on engagement.

Engagement

The term *employee engagement* has gained popularity both in organizational practice as well as research (Shuck & Wollard, 2011). Engagement surveys and initiatives are common practices for identifying and addressing workers' feelings about a variety of work-related topics, from their role in the organization, to the projects they are working on, to company values.

Various definitions exist for engagement, and several related constructs often are examined along with engagement, leading to confusion about the exact definition of employee engagement. For example, Wellins and Concelman (2005) argued that engagement consists of an employee's commitment and loyalty to the organization combined with their productivity and sense of ownership regarding their jobs. Accordingly, they outlined five constructs that underlie engagement: motivation, job involvement, job satisfaction, empowerment, and organizational commitment.

In contrast, Saks (2006), along with the various human capital consultancy firms that administer annual engagement surveys, such as Towers Perrin and BlessingWhite, assert that engagement consists of such things as intention to stay, sense of pride in working there, and willingness to refer others for employment. Still others, such as

Macey and Schneider (2008) argue that further research is needed to clearly define and deeply examine engagement as a construct separate from all others.

What is apparent from this body of literature is that employee engagement is a complex, multidimensional concept whose definition varies across researchers and other opinion leaders. Moreover, employee engagement appears to be influenced by a broad range of individual, group, and organizational factors (Kahn & Fellows, 2013). Once in place, employee engagement is believed to motivate the individual toward productive performance that is in the interests of his or her job and organization.

Kahn and Fellows (2013) further asserted that engaged employees exhibit four key characteristics:

1. Attentiveness, meaning a strong desire to know what is truly transpiring in the moment.

2. Connection, meaning both a sense of association with one's colleagues and the idea that one's work they are doing is connected to a larger purpose or goal.

3. Integration, meaning one fully utilizes one's full range of talents and intuitions to complete the work at hand.

4. Absorption, meaning the sense of flow (Csikszentmihalyi, 1990) or losing oneself in the work.

Daniels (2011) described engagement in practitioner terms, adding that employee engagement involves enthusiasm for the organization and the job beyond typical expectations. In turn, engaged employees exhibit noteworthy amounts of cognitive and affective commitment, which manifests itself in desired behavioral outcomes—such as going the extra mile in terms of dedicating discretionary effort to the job.

Measurement. Employee engagement typically is assessed using validated quantitative surveys. A popular measurement tool for academic purposes is the Utrecht

Work Engagement Scale (Schaufeli & Bakker, 2003), a 17-item measure that assesses

three dimensions:

1. Vigor: high levels of energy and mental resilience while working, willingness
    to invest effort in one's work, and persistence amidst difficulties.

2. Dedication: strong involvement in one's work and experiencing a sense of
    significance, enthusiasm, inspiration, pride, and challenge.

3. Absorption: full concentration and happy engrossment in one's work, whereby
    time passes quickly and one has difficulty detaching oneself from work

Several commercial employee engagement assessments also are in use by

companies worldwide. Importantly, these instruments often only partially align with

academic definitions of the construct. For example, Gallup's (2016) Q^{12} survey measures

whether employees believe they have the resources they need; are doing important work;

are recognized for good work; are cared about, developed, and listened to at work; have

friends at work; and are working with colleagues who care about their own work. IBM

Kenexa's (2016) engagement survey assesses employees' satisfaction and pride with their

employers as a place to work, willingness to refer a good friend or family member to

work for the company, intentions to stay, perceptions of their ability to learn and grow at

the company, and perceived importance of their jobs. BlessingWhite's (2015) global

employee engagement survey assesses employees' trust in, positive feelings toward, and

relationship with their managers; clarity about their work priorities; satisfaction with and

pride in their jobs; sense of growth in the company; dedication; and perceived importance

of their jobs.

These varying definitions and approaches to measuring engagement further

complicate understanding about what exactly engagement is, why it is important, and

how organizations may respond to varying levels of employee engagement. The next section more deeply examines the factors that influence engagement.

Influences on engagement. Various factors have been examined relative to their influence on engagement. Understandably, these factors are as varied as the definitions and instruments used in the study and measurement of engagement. The Conference Board (Gibbons, 2006) conducted a meta-study of 12 prominent employee engagement studies and concluded that eight key drivers are important for cultivating engagement: trust and integrity, nature of the job, line of site between individual contribution and company or team performance, career growth opportunities, pride about the company, coworkers or team members, employee development, and personal relationship with one's immediate manager. Notably, these drivers correspond with several of the commercial instruments available for measuring engagement (BlessingWhite, 2015; IBM Kenexa, 2016; Gallup, 2016). It follows that these commercial instruments may be assessing the drivers of engagement but not actual engagement.

A further implication of The Conference Board's (Gibbons, 2006) study is to implement these drivers into organizational practices so that engagement may be heightened. BlessingWhite (2008) advised five specific approaches: maximizing managers' engagement, driving alignment across the organization, redefining what *career* means to employees, focusing on and developing the organization's culture, and spend more time on addressing issues than surveying the state of affairs. However, it is unclear how these may directly act on the drivers identified by the Conference Board.

Bakker (2015) argued based on his study that one's perceived job and personal resources play a key role in enhancing employee engagement. Job resources concern social support from colleagues and supervisors, performance feedback, skill variety,

autonomy, and learning opportunities, whereas personal resources concern one's ability to have some degree of control and impact on his or her work environment.

Specific to enhancing the perceived meaningfulness of one's job, Kahn and Fellows (2013) advised utilizing what they called *foundational* and *relational* means. Foundational sources of meaning include challenging work, clear roles, meaningful rewards, and performing work that aligns with one's values, beliefs, passions, and skill sets. Relational sources of meaning concerns feeling heard at work, having strong relationships with one's colleagues and managers and receiving support on work-related tasks and projects.

What is encouraging for organizations about this body of research is that employee engagement appears to be somewhat malleable. It follows that organizational leaders have the opportunity to enhance employees' engagement and, in turn, enhance organizational performance and productivity. In particular, issues such as clear roles, meaningful rewards, having autonomy, and receiving recognition are related to the design of employees' roles and jobs in the workplace. The next section more closely examines the ways that job design may influence engagement.

Impact of job design. Job design refers to how the overall work of the organization is divided into specific roles and tasks that, in turn, are carried out by specific individuals. Hackman and Oldham (1980) created the Job Characteristics Model to identify the five characteristics of jobs:

1. Skill variety: the degree to which the employee needs to engage several different skills.

2. Task identity: the degree to which the employee is able to see the work unit completed from start to finish.

3. Task significance: perceived impact of the employee's job on the business, the organization, the client, and the larger world.

4. Autonomy: the degree to which the employee has freedom and discretion in scheduling the work and determining work methods.

5. Feedback about results: the degree to which the employee receives direct and clear information about the effectiveness of his or her task performance.

Jobs that offer substantial skill variety, task identity, task significance, autonomy, and feedback about results are said to be *enriched,* meaning they provide opportunities for self-direction, learning, and personal accomplishment at work. In turn, enriched jobs have been associated with employee motivation and satisfaction. Hackman and Oldham (1980) speculated that this occurs because enriched jobs produce a sense of meaningfulness, responsibility, and positive feedback for employees, leading to positive emotions and high performance.

Employee engagement researchers similarly stress the role of job design in cultivating employee engagement (Bakker & Demerouti, 2007; Kahn, 1990; Schaufeli & Bakker, 2004; Salanova & Schaufeli, 2008; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). Kahn elaborated that work contexts create conditions in which individuals can personally engage with their work. For example, he concluded that when people are doing work that is challenging and varied, they are more likely to be engaged. Bakker and Demerouti added that physical, social, and organizational aspects of one's job can become a source of engagement. May, Gilson, and Harter (2004) and Saks (2006) additionally found a positive relationship between the presence of the five job characteristics and engagement.

Gamification

Gamification refers to implementing game elements into nongame contexts such as one's work within an organization for the purpose of engaging users and solving problems (Brigham, 2015; Zichermann & Cunningham, 2011). Forms of gamification arguably may be traced back to the 1900s when Cracker Jack snack company put a prize in every box. In 1959, Duke University sociologist Donald Roy published a study on garment workers in Chicago that mentioned "Banana Time," a game employees played at work to alleviate the monotony of their job (cited by McCormick, 2013). McCormick pointed out that the concept that fun can enhance job satisfaction and productivity has inspired ample research on games in the workplace. The term gamification was first coined by Richard Bartle, a computer science undergraduate, in 1978 to describe a multi-player game he and a classmate created (McCormick, 2013).

Since Bartle's creation, the term gamification expanded to include applications for building more engaging work processes. In 2002, The Woodrow Wilson International Center for Scholars launched an initiative to create a platform for solving modern day issues like education, health care, and national security using games. In 2007, a company named Bunchball introduced game mechanics to help clients improve online engagement. Deloitte applied gamification principles through the creation of a firm-wide contest designed to trigger changes in organizational culture and behavior, discover talent, encourage innovation, and foster meaningful engagement among professionals (Kumar & Raghavendran, 2015). Research currently indicates that the gamification market will likely grow to $2.8 billion in 2016 (up from $242 million in 2012; McCormick, 2013).

The digital era and the growing size of the Millennial population (individuals born 1980-1999) are two primary factors in driving the need for gamification of work and job

design. Brigham (2015) explained that digital games are becoming more pervasive in the daily lives of most individuals. Moreover, Millennials are increasingly mobile and familiar with a broad array of digital technologies and incorporating them into their work. Millennials now comprise one in three American workers. The next section provides contextual information about games and gaming concepts.

Games and game concepts. Game design and gamification are related but not identical topics; yet, these terms will be used interchangeably in this study. Gamification emerged from the video game industry, which is a highly profitable, highly competitive, fast growing segment of the entertainment and media market (Scanlon, 2007).

Annual revenue for the gaming industry was reported at $22 billion for 2014 and is expected to continue its growth trajectory into the future (Entertainment Software Association, 2013). In the United States alone, there are 155 million gamers and 51% of U.S. households own a dedicated game console. Moreover, some 42% of all Americans play video games an average of 3 hours or more per week. The average gamer is 35 years old and has been playing video games for about 13 years.

What is apparent from these statistics is that the gaming industry has achieved customer loyalty that persists over decades. According to industry leaders, the ingredients of this loyalty are found in the game design itself (Hoffman & Nadelson, 2010). Embedded in the way games are played are characteristics such as sense of mastery and achievement, increasing levels of challenge, collaboration or competition with others, and immersion in the experience (Hoffman & Nadelson, 2010; Yee, 2007). Game playing also involves setting short-term goals (e.g., cross a bridge), medium-term goals (e.g., determining a course of escape), and long-term goals (e.g., completing a level or accomplishing the goal of the game), which further contribute to these psychological

conditions (Sheffield, 2008). Additionally, gaming is increasingly focusing on social aspects, wherein games are being played collectively as a team or as a party (Entertainment Software Association, 2015). Underlying all of these features is the concept of competition—whether it involves competing against another player (player vs. player or PVP) or competing with another player or players against an enemy or to accomplish a goal (player vs. enemy or PVE).

McGonigal (2010) articulated the captivating nature of video games as originating from the sense of flow or being in the zone (Csikszentmihalyi, 1990)—what she calls *blissful productivity*, social fabric—connection and challenge with others, urgent optimism—feeling on the verge of accomplishment, and epic meaning—feeling one is about to tackle a critical problem. Together, these factors produce the sense of always being on the verge of an epic win—meaning about to achieve something seemingly impossible but which can be achieved through persistence and dedication.

McGonigal (2010) further asserts that these qualities of games produce positive affect as well as a sense of competence, enhanced self-esteem, and vitality. Moreover, when gamers are successful, they tend to ascribe higher value to gaming tasks (Gee, 2003; Ryan, Rigby, & Przybylski, 2006; Wang et al., 2008; Warren et al., 2008).

The nature of games and the psychological and emotional states game playing produces has notable similarities to job design. Discussing these similarities is the focus of the next section.

Game concepts applied to work. Gamification involves applying game concepts to work and has been noted for fostering collaboration, informal learning, teamwork, and support as well as boosting individual and group motivation (Orosco, 2014). Particular researcher and practitioner attention has been dedicated to how elements of competition

and collaboration can be incorporated to cultivate competencies such as critical thinking, creativity, and improved communication (Berthiaume, 2014).

One way competition has been implemented is in the use of leader boards that provide broad exposure across teams and organizations about key contributors within the organization. Kronos, a company known for its Workforce Central suite, recently announced the incorporation of a new leader board feature designed to reward and recognize employees, managers, and teams for their positive job performance and adhering to an organization's time and attendance policies and procedures (Berthiaume, 2014).

Gamification also has been used to increase organization members' collaboration regarding challenging projects and problems relevant to the organization. For example, through gamified projects, colleagues are incentivized to collaborate in fun and engaging ways to bring a particular deliverable or solution to life (Orosco, 2014). In Deloitte's gamification program, employees were grouped in teams that were tasked with solving a wide variety of complex issues and real-life business scenarios facing the organization. The program also included significant play elements designed to energize, entertain, and engage contestants and spectators alike. According to Kumar and Raghavendran (2015), the program left Deloitte professionals with a positive emotional feeling toward the organization and its people.

Specific workflow tools such as JIVE software helps promote collaboration through special gamification features (Jive Software, 2000-2016). For example, users can team up to work on a project in real-time and provide nearly instantaneous feedback to their colleagues by "liking" a contribution to the project, or by deeming a particular addition to the project as "very useful." JIVE also incorporates gamified application

widgets that allow organizations and project managers the opportunity to award team members by crediting them with points or an enhanced level for their enthusiastic participation in the project. Another emerging application of gamification concerns stimulating communication and collaboration, as most solutions present a platform for employees to remain connected with the organization's cultural environment (Brigham, 2015).

At the same time, it is important to be aware that gamification is not an effective solution for some business scenarios and issues. For example, some game elements can be complex and require technical proficiencies outside the expertise of most individuals. Brigham (2015) explained that gamification may require the creation of storyboards, flowcharts, prototypes, or computer code, in addition to engaging a cycle of experimentation, assessment, feedback, and modification to experience the full benefits. Due to the demands gamification places on workers, it may not be appropriate for individuals who are less technically proficient or who are already overwhelmed with the technical demands of the day-to-day work. Other obstacles to gamification emerge when employees dislike or are demotivated by competition or when the work does not require collaboration. For this reason, decisions to implement gamification must be made carefully. Care also needs to be taken when designing the specific features of the gamification program.

Comparison to job design theory. Several similarities are apparent when comparing game design to job design. Skill variety, which reflects the degree to which the employee needs to engage several different skills (Hackman & Oldham, 1980), is also a common element of good game design. Perhaps one of the greatest challenges for game

designers is to avoid monotony and repetition in the game so as to maintain a high-level of engagement from the user (McCormick, 2013).

Task identity, which the degree to which the employee is able to see the work unit completed from start to finish (Hackman & Oldham, 1980), bears some contrast from game design because gamification is usually inserted as a component of the work processes as opposed to being the entire process (Brigham, 2015).

Task significance, the perceived impact of the employee's job on the business, the organization, the client, and the larger world (Hackman & Oldham, 1980), is perhaps the mostly clearly aligned with gamification because gamification strives to emphasize the employee's exposure and immediate impact of his or her work on the project as a whole. For example, modern gamification tools found in applications such as JIVE allow for work output of an individual to be immediately digested and used by other members of the project team. Gamification allows for a greater capacity of collaboration, which inevitably adds immediate significance to the contributions of team members.

Autonomy, the degree to which the employee has freedom and discretion in scheduling the work and determining work methods (Hackman & Oldham, 1980), also is aligned with gamification because gamification focuses on engaging employees by enhancing their freedom and ambition to accomplish a goal, without necessarily outlining the specific directions to achieve that goal. Brigham (2015) explained that gamification typically outlines clear goals but does not necessarily explain the process for getting there, thus allowing employees freedom and autonomy. Gamification provides the context for individuals to be more responsible for key project deliverables because their successes and failures are oftentimes scored in real time. This is an especially powerful

tool when used in the form of leader boards, which list employees in order of goal achievement or performance on specific tasks.

Feedback about results, the degree to which the employee receives direct and clear information about the effectiveness of his or her task performance (Hackman & Oldham, 1980), is by far the most aligned with gamification principles. The entire concept of gamification is heavily predicated on providing real-time feedback to individuals (Brigham, 2015). Modern gamification tools allow colleagues and coworkers to "like" your work or "share" your output minutes after you post it.

Given the similarities between job design approaches and gamification and the purported impact of job design on engagement (Bakker & Demerouti, 2007; Kahn, 1990; May et al., 2004; Saks, 2006; Schaufeli & Bakker, 2004; Salanova & Schaufeli, 2008; Van den Broeck et al., 2008), it reasonable to speculate that gamification may have a positive effect on employee engagement. The next section explores this proposed effect in more detail.

Gamification and Employee Engagement

A key purpose of gamification when applied to work processes is to enhance employee engagement and fundamentally shift employee behaviors toward improved performance and productivity (Orosco, 2014). Orosco points to self-determination theory to support his assertion. According to this theory, people experience psychological growth when they master tasks and learn different skills. Gamification motivates progress in these efforts and makes one's progress toward these ends visible by setting goals, measuring progress, establishing levels of achievement, character upgrading, rewarding efforts (not just success), offering rewards at intervals and ratios, and introducing peer

motivation. These various mechanics make employees' mastery of tasks and skill development visible, thus supporting people's natural drive for growth.

This concept is reflected in the gamification technique of *progress paths*. This concept is borrowed from role-playing game designs, which include a skill-tree format in which players endow their characters with additional skills as they gain experience and progress through the game. This same principal can be applied to corporate talent development processes. Palmer et al. (as cited in Orosco, 2014) describes a progress path as the use of increasing challenges and evolving stories. As such, the game challenges become more complex and difficult over time to match the user's skill level. This increase in difficulty provides the user with a sense of motivation and engagement. Corporate talent development processes oftentimes include some form of employee development plan in which they are required to identify skills and opportunities for growth. Applying a gamification method of building professional skills to get to the next level, perhaps in this case a promotion, aligns well with the organizational need to provide career pathing as a means of increasing employee engagement.

Gamification also supports human playfulness while offering challenges, providing a sense of competition with teammates, and providing rewards and prizes, further enhancing engagement (Orosco, 2014).

Vander Ark (as cited in Orosco 2014) outlined eight specific characteristics of gamification that has a positive effect on engagement:

1. Conceptual challenges: promote a greater contextual understanding of the subject matter as opposed to memorizing individual facts and figures.

2. Productive failure: celebrates shortcomings as a learning opportunity via feedback.

3. Careful collaboration: creates a greater understanding of how to leverage unique skills and encourage balance on a team between more experienced and less experienced individuals.

4. Persistence: creates a perseverant mentality to push through challenging scenarios and failures.

5. Confidence: empowers individuals to own aspects of their work and contributions, and installs a sense of control over one's actions.

6. Intrinsic motivation: inspires a sense of accomplishment through problem solving and self-development from real-time feedback and rewards.

7. Accessibility: equal availability of data and resources so that an individual can fulfill their purpose.

8. Deep learning: allows for uncomfortable and unfamiliar scenarios in which an individual is exposed to a healthy level of stress, but not over stimulated to a point of frustration.

These characteristics, when combined and integrated into various work processes, can enhance employee engagement and create an environment in which individual genius is optimized and shared for the benefit of the organization (Orosco, 2014).

Conclusion

This chapter provided a review of engagement, job design, and gamification literature. Based on available research, it appears that sufficient evidence is available to suggest that incorporation of gamification techniques may be effective in enhancing employee engagement within an organization. The next chapter describes the methods that were used to gather data for this study.

Chapter 3

Methods

The purpose of this study was to examine the potential for implementing gamification at one worksite for the purpose of enhancing employees' engagement in their work. Three research questions were examined:

1. What are participants' perceptions and experiences of gamification?

2. What are participants' levels of receptiveness to using gamification at work?

3. What are participants' recommendations for implementing gamification?

This chapter describes the methods that were used in the present study. The research design is discussed first, following by a description of the procedures related to recruiting participants, presenting the gamification concept to participants, and collecting and analyzing data.

Research Design

This study used a qualitative design. Qualitative methods allow a depth of inquiry to occur during the course of the study (Creswell, 2013). Creswell explained that qualitative researchers investigate a small set of cases to explore a variety of variables, whereas quantitative researchers tend to investigate a large set of cases related to a small number of variables. Therefore, a qualitative approach allows the researcher to capture a depth and breadth of human experience in its most authentic form (Kvale, 1996). The benefit of the qualitative paradigm is that its flexible, unfolding design allows researchers to record human experience in its depth, breadth, and nuances. A common drawback that is leveled at qualitative research approaches is the researcher bias that can affect the collection and analysis of results. A qualitative approach was considered appropriate for this study due to the lack of in-depth literature about employees' perceptions related to

implementing gamification and the potential impact on their engagement. Qualitative research has been identified as an appropriate method in such cases (Creswell, 2013).

Participants

A group of 15 employees had been designated to spearhead the implementation of JIVE software within the company. The researcher contacted the manager responsible for this group to introduce the study and solicit group members' involvement of the study. The manager agreed to the researcher delivering a presentation about gamification concepts and survey to gather their reactions. The researcher additionally distributed the survey to 35 additional contacts throughout the company (see invitation in Appendix A). Of these, a total of 18 individuals completed the online survey and two completed the survey verbally with the researcher. This resulted in a total sample size of 20 individuals.

All human protections were observed during the conduct of this study. Among these measures included obtaining permission from ABC managers before conducting the study, assuring that survey completion was voluntary and anonymous, and participation in the presentation was voluntary and confidential.

Presentation

The researcher created a PowerPoint presentation to orient participants about the history, basic features, and current organizational uses of gamification (see Appendix B). Some participants offered their immediate reactions. For example, one participant shared, "I use gamification in some work I did with the community." Another shared, "We are planning to do something like this." Two additional participants asked the researcher in person or by email to meet one-on-one to review the concept in more detail and discuss how gamification could be applied within their teams. Another participant contacted the researcher to share information she had gained about the concept.

Data Collection

Participants were directed either immediately after the presentation or by email to the online survey (see Appendix C) to offer their reactions. Participants who had not attended the presentation also were directed to a 3-minute video on gamification to orient them to the concept before taking the survey. The survey consisted of three open-ended questions designed to gather information related to the study's research questions.

Three questions were posed to answer Research Question 1, "What are participants' perceptions and experiences of gamification?" Survey item 1 asked, "What comes to mind when you hear the term gamification?" Survey items 2 and 3 asked participants to share their experiences of turning tasks in games and using gamification in their personal and professional lives.

Two survey items were posed to answer Research Question 2, "What are participants' levels of receptiveness to using gamification at work?" Survey item 4 asked participants whether gamification features would appeal to them and survey item 6 asked specifically for their thoughts about using gamification to enhance employee engagement.

One survey item was posed related to the Research Question 3, "What are participants' recommendations for implementing gamification?" Item 4 asked participants to describe their ideal gamification strategies, if implemented into their work.

Data Analysis Procedures

The qualitative survey data were examined using content analysis strategies as described by Miles, Huberman, and Saldana (2013):

1. The researcher read all the survey responses to develop an understanding of the nature, breadth, and depth of the data.

2. The researcher then examined and coded the responses one survey item at a time.

3. When all the data were coded, the results were examined again. Similar codes were combined and related codes were organized into hierarchies of codes. Data were reorganized as necessary.

4. When the coding and code review was complete, saturation levels for each code was recorded and the analysis was considered complete.

5. The results of the analysis were reviewed by a second coder. The researcher and second coder discussed and resolved any discrepancies in their assessment of the analysis.

Summary

This study utilized a qualitative design. Fifty employees in the organization were oriented to the concept of gamification and their perspectives, reactions to, and experiences related to gamification were gathered using an online survey. The data were examined using content analysis. The next chapter reports the results.

Chapter 4

Results

The purpose of this study was to examine the potential for implementing gamification at one worksite for the purpose of enhancing employees' engagement in their work. Three research questions were examined:

1. What are participants' perceptions and experiences of gamification?

2. What are participants' levels of receptiveness to using gamification at work?

3. What are participants' recommendations for implementing gamification?

This chapter reports the results that emerged from the online or verbal survey completed by the 20 participants that comprised the sample. Results are organized by research question. Participants' perceptions and experiences of gamification are reported first, followed by the themes regarding their receptiveness to using gamification at work. Finally, participants' recommendations for implementing gamification are presented.

Participants' Perceptions and Experiences of Gamification

Participants were asked to share their definitions and perceptions of the gamification concept (see Table 1). Roughly one third of participants (35%) reported that gamification turns work into a game. For example, one participant described gamification as "completing work with a twist of problem solving and [receiving] rewards along the way, similar to playing a video game." Another participant expressed, "When I hear the term gamification, I'm thinking about playing games. I'm thinking about competition. I'm thinking about having fun. I'm thinking about having group activities."

Table 1

Perceptions of Gamification

Perception	n	%
Turns work into a game	7	35%
Creates productive competition	6	30%
Involves having fun	5	25%
Turns learning into a game	4	20%
Involves using specific tools and applications	3	15%
Involves incentives and rewards	1	5%

N = 20

Nearly another one third of participants (30%) suggested that gamification has the

potential to generate healthy and fruitful competition at work. One participant responded

that "when I hear the term gamification, I think of how it could motivate employees to be

more productive for the instant recognition, and opportunity to be a winner." Another

respondent offered that gamification provided "friendly competition between colleagues

to get a task done." Additionally, one quarter of respondents felt that gamification

involved some degree of having fun. Specifically, one participant mentioned that

gamification was about "competition, points, rewards, challenges, and [having] fun."

Participants were questioned about their previous experience with gamification

either in the workplace or in their personal lives (see Table 2). More than half reported

they had created a game out of a task to make it more fun or engaging (60%). Similarly,

55% of respondents reported they had used gamification in the past.

Table 2

Experience with Gamification

	Have you ever created a game out of a task to make the task more fun or engaging?	Have you ever used gamification in the past?
Yes	12 (60%)	11 (55%)
No	8 (40%)	9 (45%)

N = 20

Regarding specifically how and why they used gamification in the past, 30% reported having turned boring tasks into games (see Table 3). One respondent expressed, that he or she used gamification "to an outcome in the least painful yet most collaborative and efficient way." Another reflected on a more personal experience of gamification saying that "while driving, on a long trip, I've come up with *I spy*-type games to keep my kids from asking 'Are we almost there?' over and over."

Table 3

Past Uses of Games and Gamification

Past Use	n	%
Turned boring tasks into games	6	30%
Measured and rewarded goal achievement	4	20%
Motivate exercise and wellness activities	3	15%
Used familiar household games for work	1	5%
Motivated philanthropy	1	5%

N = 20

Another 20% reported they used gamification to measure and reward goal achievement. One respondent provided the example of "rolling out an incentive program. . . . Whatever your productivity or quality score was, you would earn points and then you could use those points to buy company swag." Another participant shared how he or she uses gamification to measure performance and provide feedback: "I've tried to put up badges . . . to show how many processes out of the 18 processes we [have already] set up in the system so . . . others [can see] where we are at in the [project]."

An additional 15% of respondents reported that they used gamification to motivate exercise and wellness activities. One participant stated, "Fitbit is a good example of adding gaming elements to lose weight and achieve fitness objectives. . . . At a previous employer we used a similar concept as fitbit to engage employees in wellness programs."

Participants' Receptiveness to Using Gamification at Work

Participants were asked how they would feel about using some form of gamification in the workplace (see Table 4). The majority of respondents (75%) indicated they were open to implementing gamification tactics at work. One respondent added that it might be most appealing to the Millennial generation.

Table 4

Past Uses of Games and Gamification

Would gamification features appeal to you?	n	%
Yes	15	75%
Maybe	3	15%
No	1	5%
Would appeal to others	1	5%

N = 20

Participants offered varying responses related to what specific gamification aspects they would find most appealing (see Table 5). Six respondents (30%) reported that gamification would make work fun and engaging. One respondent offered,

> Anything that looks like fun and not work is always welcome. It is less stressful and makes the work enjoyable and helps drive employee engagement [because} it makes the work or learning appealing and gets people motivated to do it versus dreading it.

> Another participant stated, "It could create a fun way of finishing tasks or learning about company policies. All while creating creativity and enthusiasm within your team or company."

One quarter of participants indicated that gamification could be an effective tool for measuring performance and motivating productivity, if used correctly. One suggested, "It would appeal to me if this creates an objective way of measuring performance around a task or project." Another respondent emphasized the importance of personalizing rewards as part of a gamification strategy: "I'm more interested in innate motivation to

complete the activity. I think gamification has great potential in that area [by targeting] personal interests to engage and complete the activity."

Twenty percent of respondents believed that gamification would motivate learning. One asserted that gamification could be useful "if the game challenged employees to learn information, pick up and demonstrate new skills, or grow in their careers." Another perspective was that gamification can "make the whole learning experience sounds fun, approachable, and [fresh]!"

Table 5

Appealing Aspects of Gamification

Appealing Aspect	n	%
Would make work fun and engaging	6	30%
Could be effective in measuring performance and motivating productivity	5	25%
Would motivate learning	4	20%
May promote team cohesion	2	10%
Could promote productive competition	2	10%
Is innovative	1	5%

N = 20

Participants also voiced their concerns about using gamification in the workplace (see Table 6). Some respondents (25%) speculated that gamification may be difficult to implement effectively. One respondent explained,

> I think conceptually it's a great idea, I think in execution it can be challenging because everyone is motivated by so many different things and personalities. I would say it's about finding a balance or a common thread that everybody is motivated by, and leveraging that to motivate everybody across the board instead of focusing it on specific people.

Another participant pointed out the importance of proper administration of the gamification tactic, asserting that:

> managerial favoritism could undermine it: I think it would have to be fairly judged to be successful. Based on my understanding, I think gamification features would be appealing if the judging was fair, across the company. If every participant is being judged or graded on the same scale (if there is a neutral

outside party, or even a computer system based grading process)… However, if there are managers who are easier on their staff than others, or who are more hard on their staff that could potentially cause problems.

Table 6

Concerns About Gamification

Concern	n	%
May be difficult to implement effectively	5	25%
May produce excessive and unproductive competition	4	20%
Might not be effective for all employees or tasks	4	20%
Unsure of its purpose and value	1	5%
May produce adverse and unanticipated consequences	1	5%

N = 20

Another 20% of respondents believed that gamification may produce excessive and unproductive competition. One respondent offered, "I am concerned that they could create an unnatural competition and label people as 'types,' unless implemented really well." Another stated, "I'm not a very competitive person, so competition doesn't necessarily always motivate me. I just want to do a good job for myself." Twenty percent of participants additionally reported that gamification might not be effective for all employees or tasks. One respondent explained that it "may present challenges for employees that don't game or learn and perform in different ways."

One respondent warned of the potential for unanticipated consequences that gamification could have on the employees indicating that it "could be disastrous because the reputational cost of redesigning a poor design could set back employee engagement or create other negative consequences. [So] be careful."

Participants' Recommendations for Implementing Gamification

Related to the final research question, participants were asked for their ideas and suggestions related to implementing gamification (see Table 7). Slightly more than half

the respondents (55%) advised that gamification strategies be implemented in the

workplace. One respondent asserted, "We need to do this more often at [ABC]. We have

introduced gamification in a few instances but there is a long way to go in this area."

Another shared, "I think it's a great idea that should be explored, implemented, and

studied more."

Table 7

Recommendations Regarding the Implementation of Gamification

Recommendation	n	%
Implement gamification	11	55%
Suggested gamification strategy		

Implement rewards and recognition
    Implement virtual rewards (8)
    Implement tangible rewards (8)
    Reward individual and group achievements and contributions (5)
	15	75%

Implement rankings	3	15%
Unsure	3	15%
Assure that the system is fun, interesting, and rewarding	1	5%

N = 20

When asked what specific gamification tactics should be implemented, 75% of

respondents advised implementing rewards and recognition. Eight participants believed

that traditional virtual rewards associated with gamification, such as badges and trophies,

were appropriate. One participant mentioned they would prefer "a badge or a star symbol

or thumbs up like [indicating] a liked [contribution]." Another simply expressed that

"Badges and trophies are great."

Additionally, eight respondents asserted that rewards need to tangible, such as

points that can be redeemed for gift certificates or vouchers. One participant expressed an

interest in "money or discounts, or [other] goodies." Another suggestion was that the

rewards were "tied to the [company] Bravo program." Another respondent cited a

specific interest in "things like small electronics (iPads or laptops)."

Five respondents suggested acknowledging individual and group achievements. One reported, "it would be cool to have incentives or gamification that rewards team collaboration." Another said, "I'm a big team celebration type person. Even if I do well, I don't like to celebrate just on my own. If I do well, I want to celebrate with everybody on my team."

Summary

Twenty participants completed a verbal or online survey to provide their perceptions and reactions to the concept of gamification. Respondents perceptions of gamification focused on turning work or learning into a game, creating productive competition, and having fun. More than half reported having used games to make tasks more fun and having used gamification in the past. Popular past uses of games and gamification included turned boring tasks into games and measuring and rewarding goal achievement.

The majority of participants reported openness to implementing gamification tactics at work, given its potential to make work and learning fun and engaging and facilitating performance measurement and motivation. Nevertheless, participants did voice concerns about the difficulty of implementing gamification effectively, its applicability to all employees and tasks, and whether it may produce excessive and unproductive competition.

Slightly more than half the respondents advised that gamification strategies be implemented in the workplace. Specific strategies they recommended included implementing rewards, recognition, and rankings. The next chapter provides a discussion of these results.

Chapter 5

Discussion

The purpose of this study was to examine the potential for implementing

gamification at one worksite for the purpose of enhancing employees' engagement in

their work. Three research questions were examined:

1. What are participants' perceptions and experiences of gamification?

2. What are participants' levels of receptiveness to using gamification at work?

3. What are participants' recommendations for implementing gamification?

This chapter provides a discussion of the study results. Conclusions are presented

first, followed by recommendations, limitations, and suggestions for continued research.

The chapter closes with a summary.

Conclusions

Participants' perceptions and experiences of gamification. Study findings

indicated that participants had various definitions and perceptions of the concept of

gamification. Most respondents associated some level of fun or game playing with the

concept and view gamification as a way of turning work into a form of a game. A

significant number of other participants identified with the competitive nature of

gamification and believed it to be a core element to gamification design. Still others

focused on gamification as a learning tool and suggested it was often used to promote a

more productive classroom environment. The variations in definitions and perspectives

reflected in participants' responses is somewhat consistent with existing literature, as no

one specific definition of gamification exists (Brigham, 2015; McCormick, 2013).

Roughly half of the participants had created a game out of some task they had to

do in life in attempt to make the task more fun or engaging. This was consistent with the

finding that roughly half of the participants also indicated having some past experience with gamification in life or work. When asked how they had experienced gamification in the past, several of the respondents suggested that they used gamification as a means of turning a mundane or boring task into a game. In this case, the task could be as simple as driving from one location to another. Others experienced gamification around a system of scoring points and redeemable awards as a form of motivation. Another common response was that participants experienced gamification around wellness benefits as a means of encouraging health and fitness. This tended to be associated with the FitBit program that many companies are currently using to promote exercise and well-being.

These findings are partially in agreement with McCormick (2013), who asserted that that introducing game playing and fun into the workplace can enhance job satisfaction and productivity. Orosco (2014) additionally stated that gamification uses techniques that exploit human playfulness while offering challenges, providing a sense of competition with teammates, and providing rewards and prizes. Leveraging these mechanics by gamifying work processes can have a powerful impact on employee engagement and creating change, because they are aligned with the psychological growth referenced in self-determination theory.

Given the study results, gamification consultants need to be aware of the potential variations in stakeholders' understanding of the concept and how it may be used within organizations. In this study, respondents appeared to be familiar with the term, but few if any had been fully informed about the mechanics and specific designs that have been implemented. In the absence of a uniform definition, stakeholders are apt to hold a wide variety of unspoken perceptions and expectations about gamification, potentially leading to disparate aims, experiences, and outcomes if it is implemented.

It follows that as part of any implementation effort, the concept of gamification needs to be clearly defined. For example, loyalty programs are a popular version of gamification; however, these programs are very different in strategy and tactic from a leader board design, which creates competition as a means to motivate performance. Education needs to be provided alongside any gamification planning and implementation effort so that the strategies and designs appropriate for the setting may be selected.

Participants' levels of receptiveness to using gamification at work. Study findings indicated that the majority of participants were open to the idea of using gamification at work. Similar to Brigham (2015), one participant noted that gamification may be most appealing to the younger generation because Millennials are increasingly mobile and familiar with a broad array of digital technologies.

The most appealing aspect of gamification, according to participants, was making work more fun and engaging. Most respondents suggested that it could be used to help with repetitive tasks or other low-complexity processes. There was also a focus on applying gamification tactics to help motivate employees by creating a system of challenges and rewards.

Participants additionally indicated that gamification could be an effective tool for measuring performance and motivating productivity, but were quick to add that it was important to have a well-defined strategy in place to avoid some of the potential negative aspects of gamification. Participants also expressed considerable interest in using gamification as a learning and development tool. Another respondent pointed out that for gamification to be a valid tactic, the design would need to have a strong focus on personalizing the experience to avoid making all elements competitive in nature.

The greatest concerns around using gamification at work, as indicated by the respondents, was that gamification strategies are complex, difficult to implement, and require extensive calibration to administer effectively. Moreover, gamification may not be suitable for all employees or tasks. Brigham (2015) similarly asserted that some business scenarios are not well-suited to gamification.

Of particular concern to participants was ensuring that the program would be administered fairly, rather than becoming a tool for exercising favoritism. Some participants pointed out that if a gamification strategy is fundamentally flawed, the impact could be counter-productive and create a negative impact on employees and the organization. These responses indicate that an effective gamification strategy needs to include a well-defined focus on specific goals and success factors that are determined and vetted in advance.

Still another concern around gamification was with the typical use of competition as a motivator. Some participants noted that not all individuals are motivated by competition and it could make some employees feel disengaged. Orosco (2014) agreed that some gamification techniques are predicated on the values of competition and collaboration. One other notable concern regarded the unintended consequences of gamification and the potential for unanticipated or unknown detrimental impacts to the staff and company.

As with the previous conclusion, the findings related to participants' receptiveness to gamification emphasize the importance of carefully designing the elements of a proposed gamification program before implementing it in an organization. In particular, it is important to pay attention to the details of what tactics and strategies will be implemented and administered as well as what the overall purposes and aims of

the program are. For example, the typical components of competition and leader boards may not be appropriate within a particular work unit, depending upon the individuals within the group and the nature of their work. A comprehensive diagnosis should be performed on the targeted audience and the work they do before implementing these (as well as any) gamification element.

Participants' recommendations for implementing gamification. Study findings revealed that roughly half of the participants surveyed encouraged the implementation of gamification tactics at work. Specific gamification tactics that seemed to resonate with the participants centered on the creation of a challenge and reward system that would include both virtual and tangible rewards.

Participants seemed to be fairly well informed on some of the more traditional virtual gamification rewards such as badges, trophies, and other feedback conventions (e.g. "likes") that have been introduced through social collaboration platforms such as Facebook. Moreover, respondents reported that these traditional gamification badges and trophies would be effective as rewards. Other participants, however, wanted more tangible rewards, such as points that can be redeemed for gift certificates or vouchers. Group-level rewards could be set up to help allay concerns about heightening tension and competition between individual coworkers.

Although specific recommendations from employees were not documented in the literature reviewed for this study, Orosco (2014) did outline several specific gamification techniques that can be helpful, including establishing goals and objectives, measuring progress, upgrading characters, rewarding efforts as well as successes, giving rewards both at intervals and ratios, and incorporating peer motivation.

Implications of these findings are that gamification consultants should pay particular attention to the reward structures established in a particular program and assure that it is well aligned with the organization and its employees. As noted by one participant, individuals are motivated in many different ways, and prefer various rewards. It follows that a gamification strategy needs to allow for these variances if it is to be effective.

Recommendations

The primary recommendation emerging from this study is that any gamification program, before it is implemented in an organization, needs to be carefully designed to assure alignment with the organization's systems, work, people, and culture. For example, gamification strategies that emphasize competition may be very effective within groups of salespeople who celebrate and are stimulated by competing with colleagues. In contrast, such features could be unproductive or even destructive within groups where members must act interdependently or where a familial and collaborative culture is celebrated. Moreover, individuals within an organization or group can additionally exhibit wide variation in terms of their gamification preferences. Therefore, as part of planning a gamification program, ample information and education about specific gamification strategies and designs need to be provided to the client organization so that the concept can be fully understood and specific uses and applications within the organization can be designed.

Limitations

The primary limitation of this study is that it was conducted within one organization and, within that organization, a small sample of participants was drawn. Therefore, the findings cannot be assumed to be representative of all employees within

the organization. Nor can the findings be assumed to be representative of other organizations. Instead, the present study's findings should be considered exploratory, providing initial insights regarding employees' potential perspectives, readiness, and implementation suggestions relative to gamification at the organization. Future studies can reduce this limitation by drawing a sufficient sample from the study organization or from across organizations.

A second limitation was hypothesis guessing, wherein participants provide data consistent with what they believe the researcher wanted to hear. For example, as acknowledged at the start of this study, the researcher is a proponent of gamification and participants in the study were aware of this. Given their knowledge of the researcher's bias, the respondents may have consciously or subconsciously provided more favorable perspectives and reactions about gamification than they actually possessed. Future studies could reduce this limitation by utilizing a third party research assistant who exhibits a neutral perspective about gamification and who is unknown to the participants.

A third limitation is that participants' responses were constrained by their understanding of gamification. For example, given a more comprehensive understanding of the possible gamification designs and strategies, participants may have had different perspectives about it. Evidence that participants may have had a very limited understanding of gamification is that their suggestions for implementation centered on rewards. Although rewards are a common feature of games, rewards are but one of many strategies possible in a gamification program. Additionally, 15 of the 50 people invited to complete a survey took part in the researcher's in-person presentation about gamification. It follows that participants received varying amount of information before taking the

survey. Future studies could control for this limitation by assuring that every respondent receives the same information before completing a survey.

Suggestions for Research

A leading suggestion for research is to repeat the present study, controlling for the limitations. Such a study would include a larger sample—whether within the existing study organization or from across several organizations. All participants should receive more complete information about gamification and care should be taken to assure that all participants receive the same information. Additionally, a neutral third party research assistant should facilitate data collection to reduce the chance of bias.

Additional research could be conducted to help develop diagnostic tools for the purpose of enhancing alignment between an organization and a gamification strategy. Areas that should be addressed in the diagnostic tool should include organizational culture, systems, and worker preferences, among others.

The present study generated initial insights regarding employees' suggestions for implementing a gamification program in general as well as for the purpose of enhancing engagement. Future studies may involve the use of randomized controlled trials to better assess the effects of gamification on employee engagement. Such studies will need to include pre and post testing as well as comparisons between control and experimental groups.

Summary

The purpose of this qualitative study was to examine the potential for implementing gamification at one worksite for the purpose of enhancing employee's engagement in their work. Twenty employees in the organization were oriented to the concept of gamification and their perspectives, reactions to, and experiences related to

gamification were gathered using an online survey. Study findings indicated that participants had some understanding of and exposure to gamification—especially as it concerned turning boring tasks into games and measuring and rewarding goal achievement. Although participants voiced some concerns, many were open to implementing gamification tactics at work and recommended implementing rewards, recognition, and rankings.

The primary recommendation emerging from this study is that gamification programs, to be effective, need to be carefully designed to assure alignment with the organization's systems, work, people, and culture. Limitations of this study include its small sample size and participant bias. Suggestions for continued research are to repeat the present study while controlling for its present limitations, develop diagnostic tools for the purpose of enhancing alignment between an organization and gamification strategies, and conducting randomized controlled trials to better assess the effects of gamification on employee engagement.

References

Bakker, A. B. (2015). Top-Down and bottom-up interventions to increase work engagement. In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career intervention* (vol. 2, pp. 427-438). Washington, DC: American Psychological Association.

Bakker, A.B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*, 309–328.

Berthiaume, D. (2014, November 12). Kronos to release gamification feature in Workforce Central suite. *Chain Store Age.* Retrieved from http://www.chainstoreage.com/article/kronos-release-gamification-feature-workforce-central-suite-0

BlessingWhite. (2015). 2015 global employee engagement survey. Retrieved from https://survey.blessingwhite.com/questions.aspx?q=JnM9MzkyNjM4JnN1PTg1JnA9MyZsPTEmdT0wJnN3PTAmdD0w

Brigham, T. J. (2015). An introduction to gamification: Adding game elements for engagement. *Medical Reference Services Quarterly, 34*(4), 471-480. doi: 10.1080/02763869.2015.1082385

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixes methods approaches*. Thousand Oaks, CA: Sage.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience.* New York, NY: Harper & Row.

Daniels, K. (2011). Employee engagement factsheet. London: CIPD.

Entertainment Software Association. (2013, June 27). Report finds exponential growth in active video game market. Retrieved from http://www.theesa.com/article/report-finds-exponential-growth-active-video-game-market/

Entertainment Software Association. (2015). Industry facts. Retrieved from http://www.theesa.com/about-esa/industry-facts/

Gallup. (2016). Gallup Q^{12} employee engagement survey. Retrieved from https://q12.gallup.com/public/en-us/Features

Gee, J. P. (2003). *What video games have to teach us about learning and literacy.* New York, NY: Palgrave Macmillan.

Gibbons, J. M. (2006). *Employee engagement: A review of current research and its implications.* New York, NY: The Conference Board.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign.* Reading, MA: Addison-Wesley.

Hackman, J. R., Oldham, G. R. Janson, R., & Purdy, K. (1975). A new strategy for job enrichment. *California Management Review, 17(*4), 57-71.

Hoffman, B., & Nadelson, L. (2010). Motivational engagement and video gaming: A mixed methods study. *Education Technology Research & Development, 58*:245–270. DOI 10.1007/s11423-009-9134-9

IBM Kenexa. (2016). Engagement surveys. http://www-03.ibm.com/software/products/en/category/engagement-surveys

Jive Software. (2000-2016). Retrieved from www.jivesoftware.com

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*, 692–724.

Kahn, W. A., & Fellows, S. (2013). Employee engagement and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 105-126). Washington, DC: American Psychological Association.

Kumar, H., & Raghavendran, S. (2015). Gamification, the finer art: Fostering creativity and employee engagement. *Journal of Business Strategy, 36*(6), 3-12.

Kvale, S. (1996). *Interviews.* Thousand Oaks, CA: Sage.

Macey, W. H., & Schneider, B. (2008). The meaning of the employee engagement. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 1*(1), 3–30.

May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*, 11–37.

McCormick, T. (2013). Anthropology of an idea gamification. *Foreign Policy, 201*, 26-27.

McGonigal, J. (2010, February). Gaming can make a better world. Ted2010 presentation. Retrieved from https://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world?language=en

Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook.* Thousand Oaks, CA: Sage.

Orosco, J. S. U. (2014). *Examination of gamification: Understanding performance as it relates to motivation and engagement* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3669296).

Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The motivational pull of video games: A self-determination theory approach. *Motivation and Emotion, 30*, 347–363.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*, 600–619.

Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management, 19*, 116–131.

Scanlon, J. (2007, August 13). The video game industry outlook: $31.6 billion and growing. Retrieved from www.businessweek.com

Schaufeli, W. B., & Bakker, A. B. (2003). *The Utrecht Work Engagement Scale (UWES) Test manual.* Utrecht, NE: Department of Social and Organizational Psychology.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*, 293–315.

Sheffield, B. (2008). Game design psychology. *Game Developer, 15*(7), 18.

Shuck, B., & Wollard, K. K. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances in Developing Human Resources, 13*(4), 429-446. doi:10.1177/1523422311431220

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work and Stress, 22*, 277–294.

Wang, C., Khoo, A., Liu, W., & Divaharan, S. (2008). Passion and intrinsic motivation in digital gaming. *CyberPsychology & Behavior, 11*(1), 39–45.

Warren, S. J., Dondlinger, M. J., & Barab, S. A. (2008). A MUVE towards PBL writing: Effects of a digital learning environment designed to improve elementary student writing. *Journal of Research on Technology and Education, 41*, 113–140.

Wellins, R., & Concelman, J. (2005). Personal engagement: Driving growth at the see-level. Retrieved from www.ddiworld.com/pdf/ddi_personalengagement_ar.pdf

Yee, N. (2007). Motivations of play in online games. *Cyber Psychology and Behavior, 9,* 772–775.

Zichermann, G., & Cunningham, C. (2011). *Gamification by design.* Sebastopol, CA: O'Reilly Media.

Appendix A: Study Invitation

Hi -

I'm doing a readiness assessment for gamification features we may decide to use down the road in the [ABC JIVE] application. I'm also using the data for my thesis study on gamification of work processes as a means of increasing employee engagement.
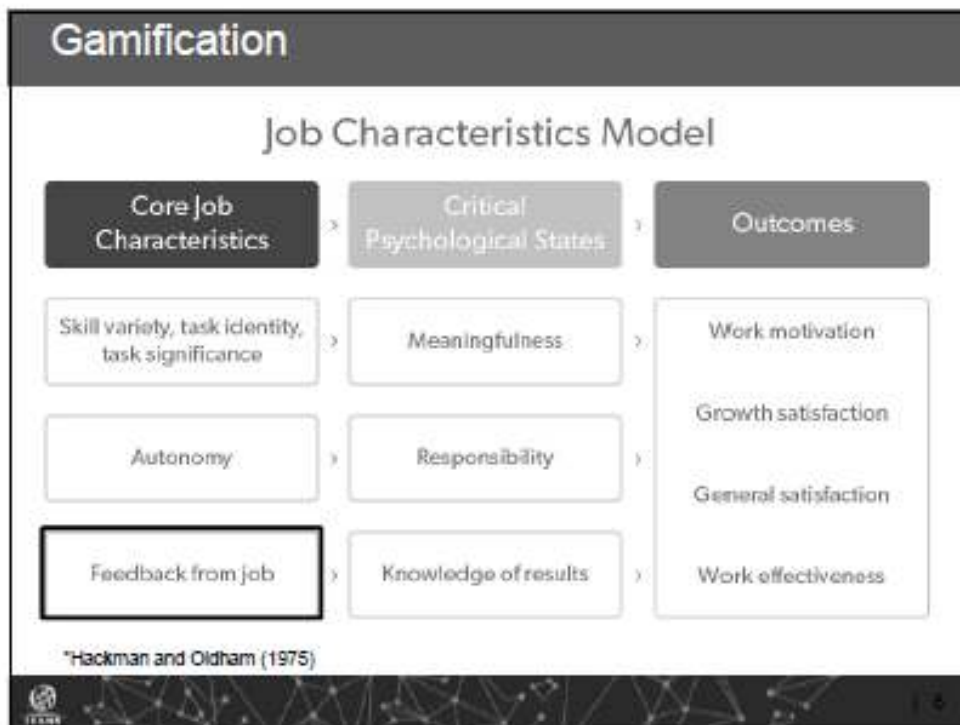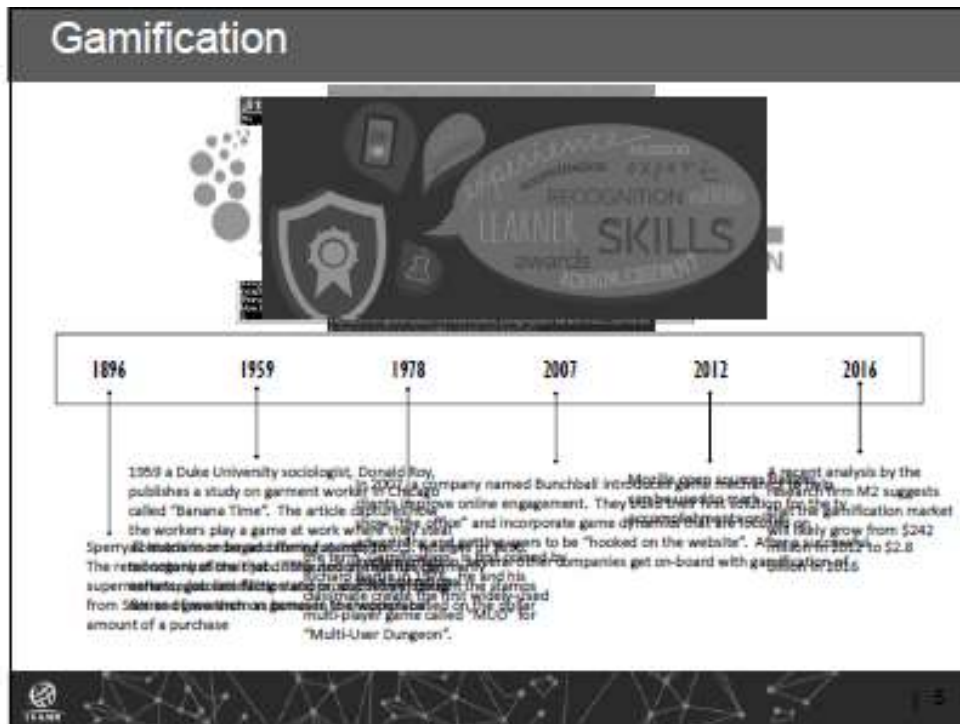
I'm wondering if you would be willing to help me out by watching the short 3 min video on gamification (if you're not already familiar) and taking the survey?
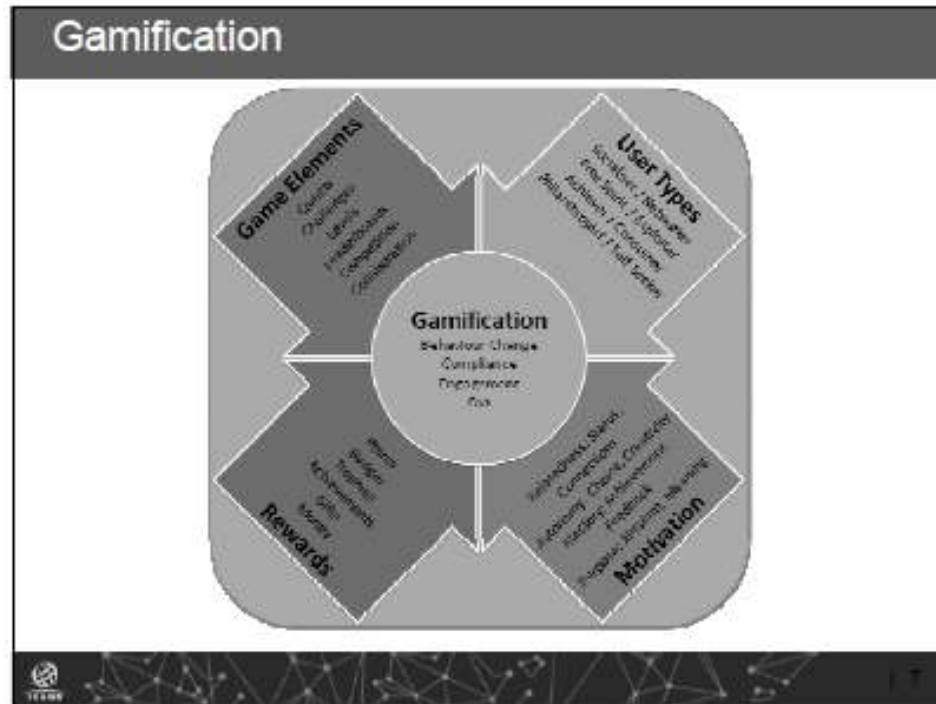
Gamification Survey < url link>

Appendix B: Gamification Presentation

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Gamification

Gamification Survey Questions

1. What comes to mind when you hear the term gamification?
2. Have you ever created a game out of a task to make the task more fun or engaging?
3. Have you experienced gamification in other jobs, organizations, or aspects of your life?
4. Would gamification features (based-off your understanding) appeal to you and why?
5. What would your ideal gamification strategy (badges, trophies, etc.) look like? What would you reward?
6. What are your thoughts on using gamification to enhance employee engagement?

Appendix C: Online Survey

1.   What comes to mind when you hear the term gamification?

2.   Have you ever created a game out of a task to make the task more fun or engaging?

3.   Have you experienced gamification in other jobs, organizations, or aspects of your life?

4.   Would gamification features (based-off your understanding) appeal to you and why?

5.   What would your ideal gamification strategy (badges, trophies, etc.) look like? What would you reward?

6.   What are your thoughts on using gamification to enhance employee engagement?