- Title:Case Study: Gamification as a Strategic Human<br/>Resource Tool to gain Organisational Competitive<br/>Advantage via increased employee engagement
- **Research Question:** Can the HR function use Gamification as a Strategic Tool to gain Competitive Advantage for an organisation via increased employee engagement?

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"One way or another, if human evolution is to go on, we shall have to learn to enjoy life more thoroughly".

Mihaly Csikszentmihalyi

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# Abstract

This thesis reviews the growing trend of using 'Gamification' within traditional enterprise human resources (HR) processes and practices. As gamification quickly becomes a hot topic across a wide range of industries, business functions and academia, and now holds a place in the Oxford English dictionary, it is a concept that has been hailed as a "game changing layer" and mocked as a "useless buzzword". According to Gartner (2012), Gamification will be in 25% of redesigned business processes by 2015, will grow to a \$2.8 billion business by 2016 and 70% of the top global 2000 businesses will have at least one 'gamified' application by 2014.

Research shows that amongst the initial adopters of gamification mechanics is the corporate HR department. Pioneers within the function are working with industry analysts and gaming organisations to build gaming platforms to deliver loyalty based or game based applications for their employees. This thesis will explore the literature available to date on this new but growing concept and explore what it is that is attracting HR professionals to support their strategic impact with gamification platforms.

The document begins by examining the HR functions role as a strategic partner to a business. It then focuses on the impact that the HR function has on increasing employee engagement within an organisation and how this is a very tangible measure of the functions influence on bottom line results and as a provider of competitive advantage. Following this the thesis reviews the role that gamification plays as a tool for increasing employee engagement in today's technology driven world where the drivers of workplace engagement are shifting.

If you were to track the history of gamification you may get the initial impression that the industry is just a few years old. However when you look closer, the ideas of using game mechanics and design to increase employee participation and engagement is not new. What is being claimed, through gamification, are the enabling tools to support organisations to take employee engagement further than it has been before. Within this thesis I tackle this claim. I set out to gain some tangible, real world, impartial evidence from the early adopters of gamification to see if in fact it can push employee engagement further than it has before and therefore should be considered as a tool to support competitive advantage through the HR function. The aim of this thesis is so that it can be used as a working document for corporate HR professionals who are currently considering using gamification platforms to support their business case for its use within their own organisation. At present there is very little research and evidence in existence, outside industry analysts and gamification gurus and technology companies, of what the benefits are to an organisation for adopting gamification platforms. This thesis will access this data from secondary and primary resources to provide this information.

The methodology adopted to support this is to position the primary research data in case study format. The case study information was gathered from five semi structured interviews with representatives from global organisations currently using gamification platforms to support employee engagement. The thesis also provides a working model that can be used as a source of reference to show the interconnections between drivers of employee engagement and their impact on competitive advantage and how gamification platforms can be used as a strategic HR tool to support these drivers.

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## **Chapter One: Introduction**

#### 1.1 Background and Context

Have you ever witnessed someone staying up until 4am to play on their PlayStation 3? or asked why there were over 75 million more people playing "Farmville" in the US than there were real Farmers? Computer games and the gaming industry have come a long way since Pac-Man (Poh, 2010).

Imagine if you could tap in to the psychology of the addiction that makes 81 million people play social games every day (PopCap Social Gaming Research, 2011) and bring it to the workplace to make work more engaging, fun and at the same time more productive. There is no need to imagine. The 'gamifying' of workplace processes has begun and the HR department has been a key corporate function in adopting the concept of 'gamification' within the business environment.

Gamification is a relatively new concept. The "Gamefication (sic) of the web" (Terrill, 2008) as it started out, has risen from a thought in the minds of computer programmers in 2008 to becoming a tangible global reality in 2012. Terrill is credited with being the first industry analyst to use the term and as the concept and the definition of the term have evolved it has grown to be a new tool within the business world. Amongst its current uses are within consumer marketing, customer engagement, internal CRM and social enterprise systems and process evaluation. However, there are some doubts about its long-term value. Sundararajan (2012), a professor at the NYU Stern School of Business who specialises in digital economics says "It's too early to tell whether the gamification trend has long-term potential. Video games, after all, have been evolving for decades so corporate gamification systems may take time to build as well". Therefore, what this thesis wishes to explore is the reality of the value that gamification is bringing to the business world today and whether it can be used as a strategic tool to gain sustainable competitive advantage. It will however focus specifically on its use within HR processes and examine as Korolov (2012) explains "if badges and scoreboards really make employees work harder for no extra pay? or will IT departments be stuck spending time and money "gamifying" work processes only to have to undo everything once the fad has run its course?" It is due to this doubt that the research question for this thesis is being posed and the conclusion will support a viable working model for investment in the future.

#### 1.2 Scope and Objectives

Research Question: Can the HR function use gamification as a Strategic Tool to gain Competitive Advantage for an organisation via increased employee engagement?

It is no secret that organisations are striving for unique and innovative ways of gaining competitive advantage in the changing business environment. This thesis will explore how the HR function, through the use of gamification can become an integral contributor to achieving this.

It is well documented that the global business environment is today trying to cope with rapid technological, economic and social changes that have required even the most stable and well-known brands to examine their entire business strategies, review their approaches to leadership and revolutionise how they conduct business. As a result of this there is a growing school of thought that the old saying of "people are our biggest assets" is indeed true and that the people within an organisation might well be the one true differentiator an organisation has. Businesses are now calling on their HR departments to step up to the mark and offer strategic business focused solutions to support them to gain an edge on competitors.

In particular the area of employee engagement has emerged as an area that can contribute significantly as a key driver to business success. Employee engagement contributes to internal success factors such as increased employee loyalty, retention and productivity issues. It also has measurable results on its contribution to external success factors such as increased customer engagement and retention, overall company reputation and stakeholder value. Thus as Lockwood (2007) writes, to gain a competitive edge companies are looking to HR to "set the agenda for employee engagement and commitment" to "gain a competitive edge". However, with research showing that 70 percent of business transformation efforts currently fail due to lack of engagement and 71% of all employees are either not engaged or actively disengaged, a radical new approach is required to reengage employees with their employers. The

concept of gamification claims to provide the antidote that can help stop the haemorrhaging of engagement. The application of game mechanics addresses engagement, transparency of work and the connection between employees' actions and business outcomes, by leveraging people's natural desires for competition, achievement and status output. But the question overall is, can it? This thesis aims to explore this phenomenon and find out from first hand users if gamification can indeed be the strategic tool to support this.

According to Gartner (2012), the world's leading information technology research and advisory company, gamification will be in 25% of redesigned business processes by 2015, will grow to a \$2.8 billion business by 2016 and 70% of the top global 2000 businesses will have at least one "gamified" application by 2014. There is also strong evidence to suggest that HR departments are amongst the main functions within enterprises to adopt the principles of game mechanics and gamification and benefit from them. From what I have evidenced there is widespread data available on what gamification is and how it is being utilised, with industry experts making predictions like the Gartner example above stating that it is the "best big thing". But the missing piece of information that HR directors are crying out for is what companies are seeing to be the overall value of investing in or adopting this strategy, to support a business case for its use. This aim of this piece of research is to show if it can contribute to direct organisational competitive advantage by its adoption and a conceptual model for how it does this.

As the HR function is called upon to support businesses to gain a strategic advantage over competitors, tangible evidence is required by business leaders to verify the strategies it adopts in a language the business understands and resonates with. However, whilst researching for this proposal no primary research can be found to show the practical adaptation of how the gamification of HR processes can be used as a source of competitive advantage. The research in this thesis aims to answer that call. The research will analyse how HR departments are using gamification techniques within HR processes. However, as this is such a new concept in corporations there is a huge importance on demonstrating value to ensure it is taken seriously at the strategic level within HR processes. To support this; the primary research will review real life

case studies on organisations who are currently using game mechanics and how it supports them achieve increased engagement levels from employees.

## 1.3 Overview of Thesis

Literature, media and the gamification industry players suggests that gamification concepts are currently being used by global corporations within HR processes in areas as such as Social and Collaborative Learning, Digital Executive Training Programmes, Employee Recognition, Employee Engagement, Reward and Motivation, Facilitation of Virtual Working, Recruitment and Health and Wellbeing promotion. This thesis focuses on the use of gamification as a strategic HR tool to gain competitive advantage through increased employee engagement.

Recent engagement numbers released from Gallup show that 71 per cent of American workers are "not engaged" or are "actively disengaged" in their work. This creates dangerous knock on effects on productivity and profitability and "costs the American economy up to \$350 billion per year in lost productivity" (Gallup, 2012). Industry analysts maintain that one of the key drivers for this occurrence is because employees are no longer motivated by extrinsic rewards alone and there is a desperate need to tap in to the intrinsic motivators of employees.

The perceived power of gamification is seen as an enabler of this as "it taps into the competitive fires we all have and as we play a game, we become more engaged, feel a greater sense of accomplishment and are more willing to go the extra mile" (Meister, 2012). It is for this reason that the research in this thesis focuses on this area to find evidence if this is indeed true.

Chapter Two outlines the literature review that considers the critical points on current knowledge pertinent to this thesis topic. The literature is broken down in to the following subsections:

- The first sub section of the literature review looks at how the HR function, through operating in a strategic mind-set can support organisational competitive advantage through people process and work practices.
- The second subsection focuses specifically on the area of employee engagement. This section explores how this is a key area within HR Strategy that has measurable impact on an organisations bottom line and influence over future survival and growth over competitors. This section shows how engaged employees care about the future of the company and the attitudes and mindsets with which they choose to approach each day and their willingness to invest discretionary effort can have proven impacts on competitive advantage.
- The third subsection looks at the changing drivers of employee engagement in today's changing world of work and how emphasis must be placed on new ways of driving motivation within employees to contribute the discretionary effort required in their working day.
- The fourth, fifth and sixth subsections look at the concept of enterprise gamification and its use within HR strategy. Specifically however it looks at how gamification can be used as a strategic HR tool to drive intrinsic motivation and change behaviour to support increased employee engagement.
- Finally with the evidence collected in the previous subsections the literature review summary proposes a conceptual model to summarise the impact that gamification has on influencing employee engagement and how this links with HR strategy and overall competitive advantage for an organisation.

Chapter Three outlines the primary research aims and objectives. The main aim of the primary research was to conduct semi structured interviews with current corporate users of gamification platforms. The research objectives is to find tangible evidence from early adopters on how the use of gamification platforms have supported them to increase the engagement levels of their employees and to establish if this has had an impact on their organisational competitive advantage. The research is presented in single phenomeoum case study format as this is shown to be an appropriate methodology for this research.

Chapter Four outlines the research methodology used in the primary research approach. It reviews the research philosophies, research approach and justification for the qualitative case study research method used.

Finally, Chapters Five and Six present the Primary Research Findings and Discussions and Conclusions of the Findings. The information gathered from the primary research was used to validate the conceptual model to summarise the impact that gamification has on influencing employee engagement and how this links with HR strategy and competitive advantage, which was outlined following the literature review. The purpose of this model is to have a visual tool that can then be used as a guide for HR professionals currently considering the introduction of gamification within their HR strategy. This can be utilised when presenting a business case for investment in gamification technology to support organisations efforts of achieving organisational competitive advantage in the fast moving, technology driven age of today.

An overview of the thesis structure is given in figure 1.1 overleaf.

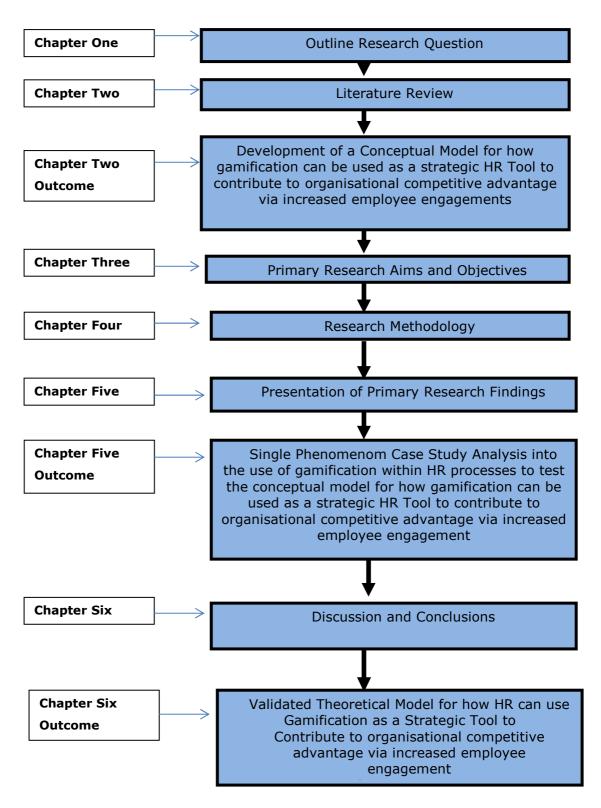


Figure 1.1: Overview of Thesis Structure

### Chapter Two: Literature Review

## 2.1 HR Strategy: A Source of Organisational Competitive Advantage

It is no secret that the HR function has struggled to prove its strategic importance within organisations. Hammond (2005) summarised this in stating that the HR function is the one with the greatest potential to contribute to an organisations success as it is "the key driver, in theory, of business performance" however it is also the "one that consistently under delivers". For this reason many HR academics and professionals have worked hard to fight against this perception by positioning themselves more as business professionals and partners to the business and understanding the importance of aligning their initiatives with a business case. Ulrich (2008) has stated "In the last decade, HR professionals have worked to become business partners and to align their work with business strategies". It will only be by having a strategic and business mind-set that future support will grow. The Irish Business and Employers' Confederation (2012) have recognised this by saying "Strategic HR can contribute significantly to the organisation by enacting the organisation's strategy through a focused HR plan which is in line with the organisational goals".

In the Changing World of Work and in a global business environment that is today trying to cope with rapid technological, economic and social changes that have required even the most stable and well-known brands to examine their entire business strategies, the people processes and work systems a company adopts are recognised as being a critical success factor to a business's competitive advantage. One organisation that has recognised this is Standard Life Canada, CEO Iannicelli (2012) claims that "people are our most non easily imitated competitive advantage". He recognises that "great people make up for a lot of not so great things" and understands how good people can overcome a bad structure or how "good sales people can figure out ways of selling a poorly positioned product". Jack Welsh of GE concurs and believes that "HR managers have the most important job in America and that CEO's should value their HR managers as much as their chief financial officers" (Welsh, 2012). He uses the analogy of comparing a HR executive contribution to the organisation as that of a

"VP of Player Personnel on a sports team" and that all the accountant does is "tell you the score", whereas the HR person "builds the team to create the score".

Dyer (1993) also believes that there is "solid theoretical reasons" to believe that competitiveness can be enhanced through "more effectively managing human resources". He states that it is after all people that "identify business opportunities, develop products and services, formulate strategies and deliver products to the marketplace". In a 1995 study by Huselid of large scale US manufacturing companies across a range of industries and firm sizes solid evidence was produced of the use of high performance people practices having a direct impact on the firm's financial performance. Another source of evidence comes from Guest et al. (2003), who studied 366 UK companies using objective measurements, who concluded that the effective deployment of HR "offers one of the most powerful bases for competitive advantage". So from personal opinion of business leaders to research evidence there is certainly evidence to conclude that the HR function offers a source of competitive advantage to an organisation.

It would also appear that due to the ever changing macroeconomic conditions the importance of strategic HR as a function is finally resonating. According to the PWC 15th Annual Global CEO Report (2012) talent and HR strategy has made its way to the boardroom. This research highlights that "Talent is now an integral part of strategic planning, tied to business plans and growth targets". The reason for this is because the challenges in finding and retaining the right mix of people are affecting profitability. The research shows that "almost a quarter of US CEOs say they were unable to pursue a market opportunity and another fifth state they were unable to innovate effectively because of talent constraints".

However as Schuler (1987) points out; as many organisations recognise that HR can contribute to competitive advantage, few are "conceptualising them in strategic ways". Porter (1990) agrees that "Companies achieve competitive advantage through acts of innovation" and innovation in the "broadest of sense". This includes HR and people management practices. Therefore, the HR function itself needs to find innovative new ways to harness its strength as a source of competitive advantage in today's fast paced organisations.

# 2.2 Employee Engagement: A Source of Organisational Competitive Advantage

The Chartered Institute of Personnel and Development (2008) define engagement as being positively present during the performance of work when "people willingly contribute intellectual effort and experiencing both positive emotions and meaningful connections with others". Employee Engagement is one of the key areas within HR strategy that has measurable scientific metrics on the impact it can have on an organisations bottom line and competitive advantage. According to Gallup (2013) "Engaged organisations have 3.9 times the earnings per share (EPS) growth rate of organisations with lower engagement in their same industry". Also, one study by Hay Group (2009) discovered that organisations that scored in the top 25 per cent of engagement levels had revenue growth 2.5 times that of organisations in the bottom 25 per cent. These figures are fundamental to showing how a focus on employee engagement can be used as part of the wider HR strategy to have direct impacts on competitive advantage and the bottom line. Wiley (2012) simply states that "engagement is a means to an end", meaning that organisations who want their business to success need engaged and motivated employees to get them there.

A 2010 Right Management global survey on employee engagement with 28,810 respondents showed that overall having an engaged workforce contributed to a 44% higher retention rate of employees, 33% more company profitability, 50% more productive workforce and 56% higher customer loyalty rating. This evidence can clearly lead us to the conclusion that organisations that can get employee engagement right can expect a competitive advantage in HR strategy and business results.

For companies that believe that employees are one of their key sources of competitive advantage, having a motivated and productive employees can be the make or break ingredient to contribute to the overall competitive advantage of the organisation.

Competitive advantage means different things to different organisations and many academic definitions have been produced. Under the scope of this thesis a full examination of what constitutes competitive advantage to an organisation was not examined. Besanko, Dranove and Shanley (2000) define competitive advantage in terms of when an organisation earns a "higher rate" of customers, value, profit,

satisfaction "than the average rate of other firms competing in the marketplace". Whatever criteria an organisation decides to gauge their competitive advantage on, having a highly engaged workforce can be directly attributed to varying competitive advantage scorecards. This is further highlighted in the examples below:

- A study of 64 organisations revealed that organisations with highly engaged employees achieve twice the annual net income of organisations whose employees lag behind on engagement. (The Impact of Employee Engagement, Kenexa, 2008)
- Standard Chartered Bank reported that in 2007 they found that branches with a statistically significant increase in levels of employee engagement (0.2 or more on a scale of five) had a 16 per cent higher profit margin growth than branches with decreased levels of employee engagement. (Engaging for success: Enhancing performance through employee engagement, UK Government Study, 2010)
- Sears measured that a 5 point improvement in employee attitudes drove a 1.3 point improvement in customer satisfaction, which in turn drove a 0.5% improvement in revenue. (The Employee-Customer-Profit Chain at Sears, Harvard Business Review)

Employee Engagement as a driver of organisational success is a complex concept with varying issues influencing engagement levels. In its simplest form according to Lockwood (2007) employees who are engaged "work harder, are more loyal" and are more likely to "go the 'extra mile' for the organisation". From the evidence above, we can see that having an engaged workforce drives the desired behaviours in an organisation to support it maneuver above others in a competitive business environment. The critical key is fostering the environment where you include the critical factors to achieve the required levels of engagement from your workforce.

### 2.3 New Drivers of Employee Engagement

It is an accepted fact in today's business world that organisations expect employees to do more and for less. However, according to Towers Watson (2012), a leading global professional services company that helps organisations improve performance through effective people, "organisations appear to be at a critical tipping point in their ability to maintain engagement overtime". According to their research, the intensity of an employee's connection to an organisation is based on three core elements, that of;

- The extent of employees' discretionary effort committed to achieving work goals
- The ability to meet work challenges effectively through the availability of resources to perform
- The provision of a work environment that energises the employee through a supportive social environment and feelings of achievement and accomplishment at work.

Towers Watson has evidenced, through their global research, that in contrast to many of the more "reward orientated elements", the drivers of sustainable engagement today "focus almost entirely on the cultural and relational aspect of the work experience" (Towers Watson Global Workforce Study, 2012). This would show that although important, employees today are less motivated by monetary elements alone but more by the experience that going to work gives them.

Added to this dramatic change, Aon (2012) conducted a deep dive in to the changes in the critical elements that impact driving positive employee engagement in today's business environment. This analysis concluded that improvements in the area of "Employee Recognition" within an organisation are a critical success factor. However, recognition is not viewed in the traditional forms of pay and benefits but that of "employees need for feedback and positive reinforcement". Employee's need to know how they are performing and how this performance is contributing to the overall success of the organisation. The look and feel of today's organisations are changing. The lines of definition between work and play appear to be loosening. This is evidenced through the globally renewed success of organisations such as Google, Facebook and Zappo's. These companies have evolved their workers from employees to powerful ambassadors for their brands. Amongst the core values at the culturally renowned organisation of Zappo's are to "create fun and camaraderie and build a positive team and family spirit". Riordan (2012) writes however, that "camaraderie is more than just fun". Studies have shown that soldiers form strong bonds during missions in part because they believe in the purpose of the mission, rely on each other, and share the good and the bad as a team". She states that "in short, camaraderie promotes a group loyalty that result in a shared commitment to and discipline toward the work. Camaraderie at work can create "esprit de corps," which includes mutual respect, sense of identity, and admiration to push for hard work and outcomes". Evidence suggests that much of these change in the drivers of engagement at work are driven by the millennial generation of employees that are now flooding the marketplace.

Due to the changing macroeconomic and global environments the HR industries top professionals and academics are preparing companies for "a new normal" (Manpower CEO Jeff Joerres, 2011) when it comes to evaluating their workforce engagement strategies. To summarise what changes will occur in the "Future of Work" Gratton (2011) of the London Business School tells us that "many of the ways of working we have taken for granted in the last 20 years – working from 9 to 5, aligning with one company, taking the weekends off, working with people we know – will disappear". Meister and Willyerd (2010) concur and within their research on the "20 20 Workplace" discovered that "the workplace of the future is being shaped today by Web 2.0 - a collection of breakthrough social media technologies - and the Millennial Generation, born after 1980". A consequence of this it that these "hyper-connected workers will put increased pressure on employers to overhaul their approach to the management of their talent".

Overall the research suggests that new approaches need to be adopted to attract and engage employees in the future. Price Waterhouse Coopers (PWC) published the "Millenials at Work Survey" in 2011. This survey was conducted with over 4,000 university students to ascertain what they expect from future employers. Key findings that impact on this proposal include:

"Development and work/life balance are more important than financial reward: This generation are committed to their personal learning and development and this remains the most essential benefit they want from employers. A techno generation avoiding face time: 41% say they prefer to communicate electronically at work than face to face or even over the telephone. They routinely make use of their own technology at work and three-quarters believe that access to technology makes them more effective at work. Generational tensions: Millennia's say they are comfortable working with older generations and value mentors in particular however half felt that their managers did not always understand the way they use technology at work".

What this evidence points to is a dramatic overhaul of how organisations engage and motivate employees in the long-term. As employee attitudes to work change, organisations will need to adopt more innovative techniques to satisfy employees' physical, cognitive and emotional needs as they perform their work roles.

#### 2.4 Enterprise Gamification Definition

There is much discussion and contention amongst industry professionals and academics over the scientific definition for "gamification" and indeed the use of the word itself. However, it appears a widely accepted academic definition of it is the description given by researchers Deterding, Khaled, Nacke and Dixon (2011) who define gamification as "the use of game design elements in non-game contexts". They produced their much quoted paper entitled *From Game Design Elements to Gamefulness: Defining gamification as* "little academic attention has been paid to a definition of the concept of gamification".

One area that is agreed upon by writers in this area is what gamification is not. As Xu (2012) concludes in one of the latest research papers in to gamification, that "gamification is not games". This is a fundamental issue for achieving support at a strategic business level. Gamification has a serious side and as the Schumpeter Blog

wrote in the Economist Newspaper in November 2012 "Video games now have the dubious honour of having inspired their own management craze called 'gamification', it aims to take principles from video games and apply them to serious tasks". It is due to the interpretation of the word 'game' that the word itself has been seen as its greatest foe in putting across the business case for its application to solve HR and business issues. Hugo (2012), author of *Serious Games: The Future of Work* describes gamification as "an awkward word" to describe the practice of "applying gamedesign thinking to non-game applications so people find them more interesting and engaging." So while it is key to define what gamification is as a concept it is as important to position it so that an appropriate balance is achieved between the concept and the implied meaning of the word itself.

Fairchild (2012), Editor-in-Chief of HR Lab, re-emphasises the importance of displaying the business side of gamification. She explains that "the idea of playing 'games' just doesn't sit well. In their minds (business leaders), business is about work and games are about play" but she goes on to state that "unfortunately for those businesses, that perception is dead wrong". So in order to support the business case for why "gamification will rule the world" as reported by Belsky in Time Magasine in August 2012 or why a business should jump on the "Game Tsunami" as described by Stanford professor Reeves in his 2010 book *Total Engagement* it is fundamental to understand the elements that make up the term gamification.

Therefore it is the comprehensive definition as given by Wu (2011) that will be used for the basis of research in this thesis.

"Gamification is the use of game attributes to drive game-like player behaviour in a non-game context. This definition has three components: 1.The use of game attributes, which includes game mechanics/dynamics, game design principles, gaming psychology, player journey, game play scripts and storytelling. 2. To drive game-like player behaviour, such as engagement, interaction, addiction, competition, collaboration, awareness, learning. 3. In a non-game context, this can be anything other than a game". The concept is explained further by Meloni and Gruener (2012) who state that the basic concept of gamification is that is takes advantage of game mechanics to deliver engaging applications and make non-game applications "more entertaining and appealing". However much the concepts behind gamification may not be new, what is changing is the enabling tools to create the opportunities for corporate functions to capitalise on them to help even the most mundane human interacts become more engaging and fun.

# 2.5 Gamification - A Tool to Drive Intrinsic Motivation and Changing Behaviour

While there remains doubt about the long term benefits of gamification, most accept that designing systems to engage people to act is not a new concept. People have being applying game-design thinking into various applications for a long time. One of the oldest examples is regularly cited by one of the main thought leaders on gamification, Gabe Zichermann. Zichermann (2011) states that "one of the first loyalty programs that awarded customers by sticking to certain behaviour over time started in the 1890's by S&H and their virtual currency that customers received when buying goods from certain stores called 'Green stamps'". This virtual currency could be redeemed for several types of material rewards. These 'Green stamps' were a huge success and "some authors described the situation in North America as being afflicted with a 'licking frenzy' referring to the activity where customers glued the stamps in collection books". What is key here is that the 'licking frenzy' was not driven by the extrinsic urge to receive the material rewards. The customers could rationally see that they were probably paying extra for these stamps and thereby never really got anything for free. This was about "the intrinsic reward of having received something extra that was hard to value in real currency, and being part of a social movement". It is this idea of motivating people to act intrinsically that lies at the heart of gamification within HR.

Unlocking motivation while satisfying the personal needs of employees has always been a high priority for HR professionals. The motivation theory of Maslow (1943) has for decades been used by HR professionals to describe the hierarchy of needs that employees have to satisfy in order to be motivated at work. At the lowest level people need safety through security and money, then a sense of belonging which people achieve through community dynamics and social cohesion. Once these are satisfied there is the need for esteem which is achieved through status, achievement and rank. According to Wu (2012) these are simply "the mechanics of game dynamics". However as we move through the hierarchy of needs the top level are as termed by Maslow (1943) our "meta needs" that drive human behaviour intrinsically. Pink (2009) identifies three "intrinsic motivators" that form the core of our being needs. He identifies these as "autonomy, mastery and purpose". Autonomy is achieved through "ownership, serendipity and blissful productivity". Mastery is achieved through points and progression" and Purpose is "discovery, quest, and justice". These, Wu (2009) points out are also "the essence of game mechanics and dynamics". What this shows brings us back to the definition of gamification quoted earlier. Using game attributes such as game mechanics and dynamics can encourage behaviour that is consistent with being motivated both extrinsically and more importantly intrinsically.

However it is thought that the ultimate level of intrinsic motivation is achieved in "the state in which people are so involved in an activity that nothing else seems to matter" (Csikszentmihalyi, 1997). In this 'State of Flow', "humans achieve control of consciousness and turn even the most humdrum moments of everyday life into events that help them self-grow". Flow is achieved through "challenging activity that requires skills, clear goals and immediate feedback" and "when one is thoroughly absorbed in an enjoyable activity there is no room for troubling thoughts". It is this state of "Flow" that has captured the imagination of HR professionals to attempt to translate this effect from social gaming to the workplace.

However "within the state in which people are so involved in an activity that nothing else seems to matter, there is a fine line between too high a challenge which will produce anxiety and too easy an activity will produce boredom". Therefore for gamification to add true value to HR practices "good gamification must evolve and adapt to the player" (Wu, 2012). According to McGonigal (2011), studies have actually shown that people are at their happiest when doing hard work at the borders of their skill level and that people need to be challenged and receive continuous feedback on their work, otherwise they will be bored. McGonigal, who is a world renowned game designer specialising in pervasive gaming, describes that depressing feeling at work when the employee wants nothing else than just get to the couch and leave work and stress behind. She argues that this is because companies often fail to continuously challenge their employees at the right level in a structured way, and without giving them frequent feedback. The concept of gamification attempts to fight against this phenomenon and use points, levels, rewards, challenges and fun to engage employees and change their behaviour often without them even knowing it is being done.

Further evidence from industry expert Gartner (2012) has identified four principal means of driving engagement using gamification techniques:

- Accelerated feedback cycles: Gamification increases the velocity of feedback loops to maintain engagement.
- Clear goals and rules of play: Gamification provides clear goals and welldefined rules of play to ensure players feel empowered to achieve goals.
- A compelling narrative: Gamification builds a narrative that engages players to participate and achieve the goals of the activity.
- Tasks that are challenging but achievable: Gamification provides many shortterm, achievable goals to maintain engagement.

As previously stated people have been applying game-design thinking into various applications for a long time to increase loyalty and engagement. The emerging concept of gamification however attempts to understand and align an organisation's objectives with a player's intrinsic motivation. Then, through the use of extrinsic rewards and intrinsically satisfying design, move the player through their journey of mastery. This journey requires elements such as desire, incentive, challenge, reward and feedback to create engagement.

### 2.6 Gamification as a Strategic HR Tool

Gamification "is the hot new buzzword in HR as a progressive way to reward behaviour that can help create powerful business results" McInness (2012). According to the Deloitte's "Tech Trends 2012", their annual report that examines trends in technology for practical business use, "organisations that embrace the trend (of gamification) have the opportunity to find a competitive edge in recruiting, retention and talent development". The process however must not been seen as a separate entity to existing business strategies or a stand-alone product.

Butow (2012) stresses that in order to achieve overall competitive advantage if game mechanics are used by HR departments they must be aligned to a business need. He states that you need to find out "What are the overarching business objectives and be very clear about how gamification in HR will support this. Gamification is not the sprinkles you put on top of chocolate ice-cream, it needs to be in the ingredients of the ice-cream mix". This points to a clear correlation between the business strategy, the HR strategies alignment to this and then a gamification strategy linked to solving a particular business problem.

Whilst attending gamification industry webinars and seminars aimed at HR professionals the question that continually arises is "how do I sell this to the C-Suite?" So even if the advantages of using gamification are seen to drive HR processes and appropriate behaviours by HR professionals the stumbling block is helping the business to understand its value to make the investment. Gamification Industry experts are keen to articulate that within HR "the key to any gamification solution is a clear strategy that articulates the business drivers and measurable objectives" (Presence of IT corporate website, 2012) and are experts at offering support to "positioning gamification" and "assist you in addressing return on investment and solid business impacts". But a word of warning comes from gaming industry thought leaders who admit "vendors have played a huge role in driving the growth of gamification" (Zichermann, 2012). The business functions such as HR who are proposing the use of gamification to help with business needs must come up with their own evidence for the value it is creating.

Further research suggests that HR writers such as Kapp (2012) are warning that HR professionals need to be "cautious as gurus and consultants treat gamification as a personal gold rush". What the HR function does not need now after years of striving to get its seat at the strategic table is to fall for what Deterding (2012) describes as the "grandma loves romance novels fallacy" the notion that "because young people like games, they will like and demand XYZ to be gamified". However, with these cautions in mind the philosophy of gamification appears to be maturing and becoming more confident within itself as more and more organisations adopt it within HR functions.

The HR Tech Summit 2013 claimed that "once the initial shock" of playing games at work dissipates there is an "infinite amount of possibilities available" by the "embracing of gamification platforms". As previously stated the literature, media and gamification industry suggests that gamification concepts are currently being used by global corporations within HR processes in areas as such as Social and Collaborative Learning, Digital Executive Training Programmes, Employee Recognition, Employee Engagement, Reward and Motivation, Facilitation of Virtual Working, Recruitment and Health and Wellbeing promotion.

Meister (2013), a Forbes columnist and director of the Future of Work Institute offers that "2013 will be the year of social HR". She predicts that as more research, studies, and real-world examples proving the power of incorporating game mechanics into non-game activities appears "gamification will become standard practise" and make "huge inroads in HR practises". Its huge draw to HR processes is its ability to "achieve higher levels of engagement, change behaviours and stimulate innovation" (Chamberlin, 2013). Furthermore "gamification techniques leverage people's natural desires for competition, achievement, status, self-expression, altruism, and closure" (Espinosa, 2012). It is the core ability of gamfication to provide intrinsic rewards to players for accomplishing desired tasks and by providing leader boards as a way of encouraging competition, to drive participation that lies at the heart of gamification within HR practices.

However, not only is gamification seen as a major contributor to encouraging desired behaviours within organisations it is also seen as a powerful source of information and data. Gamification applications within an organisation track user's activities, failures and achievements, and progression through the system contributing to powerful gamification analytics and data. This data becomes a powerful source of evaluating employees. As a leading industry expert Herger (2013) explains, companies will be able to use this data to "be able to get the right people on the right teams and projects". This ability to have the right people, in the right place at the right time is a critical element of the effective management of any organisations HR to achieve efficient and effective operations and support its strategic contribution to the organisations competitive advantage.

Therefore, as the basic concepts of gaming are to satisfy peoples want for immediate feedback, to enjoy achieving small quests, to be a platform to compare their results with others, be a means to be recognised for achievements and a platform to enjoy seeing their progress, there seems to be a valuable fit to go some way towards matching the engagement drivers of today's workplace.

#### 2.7 Literature Review Summary

The literature review reveals that in the highly competitive, pressurised and fast changing business world organisations must adapt quickly to a new way of conducting business in order to future proof themselves. Within this volatile framework finding new sources of competitive advantage and differentiation are proving more and more difficult to achieve. Due to this, many progressive organisations are waking up to the reality that it may indeed be the people they have working with them that can make that difference. Effective HR strategy aligned to the overall business strategy can make a significant impact to the bottom line.

Business leaders are looking to their Chief HR Officers to improve their bench strength of employees to support their overall business objectives. They are realising that in a world where technology is so readily available, customers have become so demanding and there are constant threats of competition from emerging markets, their one true source of competitive advantage will come from the people they employ. One main source of ensuring this occurs is through the engagement of employees to have true alignment with the organisations goals and desired success metrics.

However the HR function is not immune to the challenges of today's world and must itself progress to cope with the demands of the modern world of work. The use of gamification within HR Strategy is seen as a modern day tool to support future thinking HR Strategy. Through its ability to tap in to some of the core attributes that attract and engage employees such as providing continuous feedback, increasing intrinsic motivation and providing the digitalisation that employees require, there is a direct link to increasing an organisations competitive advantage by leveraging this approach to its HR Strategy.

It is through the findings of the literature review that a conceptual model to summarise the impact that gamification has on influencing employee engagement and how this links with HR strategy and competitive advantage for the basis of the primary research has been designed. This model shows that using Gamification as part of the HR Strategy can be a pivotal tool in increasing organisational competitive advantage through addressing key "pains" impacting on corporate HR departments, that of Employee Engagement. This model is shown in figure 2.1 overleaf.



Figure 2.1: Conceptual Model of how HR Function can use Gamification as a Strategic Tool to Gain Competitive Advantage for an Organisation

## Chapter Three: Research Aims and Objectives

The overall aim of this thesis is to assess if and how the HR function can use Gamification as a Strategic Tool to gain Competitive Advantage for an organisation via increased employee engagement? This will be explored through meeting four research objectives, outlined below, to then provide an informed discussion and conclusion.

#### 3.1 Objectives

- 1. To examine published literature on the evolution of the gamification as a concept and tool to drive increased employee engagement within an organisation and in turn have a measurable impact on the competitive advantage of an organisation.
- 2. Through this research to construct a conceptual model to create a visual representation of the summary of available literature to examine how the HR function can use gamification as a Strategic Tool to gain Competitive Advantage for an organisation
- 3. Collect empirical data from early adopters of gamification within HR processes to test the conceptual model
- 4. Review the conceptual model based on the findings of the empirical data to confirm a robust model to explain how the HR function can use gamification as a Strategic Tool to gain Competitive Advantage for an organisation

According to Gartner (2012), the world's leading information technology research and advisory company, gamification will be in 25% of redesigned business processes by 2015, will grow to a \$2.8 billion business by 2016 and 70% of the top global 2000 businesses will have at least one "gamified" application by 2014. There is strong evidence to suggest that HR departments are amongst the main functions within enterprises to adopt the principles of game mechanics and gamification and benefit from them. From what I have evidenced there is widespread data available on what gamification is and how it is being utilised, with industry experts making predictions like the Gartner example above stating that it is the "best big thing". But the missing

piece of information that HR directors are crying out for is what companies are seeing to be the overall value of investing in or adopting this strategy to support a business case for its use. This thesis involves conducting primary research with current users of gamification platforms within their internal processes to increase engagement amongst their employee populations. Through this, the readers will have impartial evidence based case study information to support their own business case for its adoption or not within their own business settings.

Due to the lack of academic research on this topic, a theoretical framework or conceptual model is constructed based on the literature review in order to approach the implementation of gamification into corporate HR Strategy. The aim of this thesis is to test the conceptual model presented within the summary of the literature review, through case study research in the real world. The primary research objectives are to discuss the use of gamification platforms with HR practitioners currently using them within their HR processes. The overall aim of this will be to determine if this model is accurate in its assumption or requires revision based on the empirical research collected and if indeed there is a case for the use of gamification for the provision of organisational competitive advantage.

## Chapter Four: Research Methodology

#### 4.1 Introduction

Research can be defined as something that people undertake in order to find out things in a systematic way thereby increasing their knowledge (Saunders, Lewis and Thornhill, 2003). Blaxter does not disagree with the outcomes stated above however he does question if a systematic or linear approach will be "limiting and constraining". He therefore introduced the research spiral which allows the research process to be "more flexible and open to changes in direction". It is this approach to research that has been a consistent theme throughout this research project. As a new but growth phenomenon, the area of gamification is an extremely dynamic topic. As a result of this, the research for this thesis has been written up in a flexible manner as new industry and academic research and articles are published and interest has blossomed in the topic over the last 9-12 months.

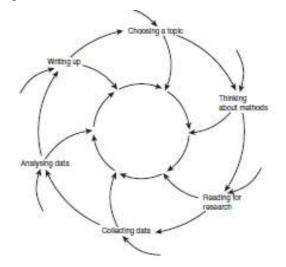


Figure 4.1: Illustration of the Research Spiral (Blaxter et al., 2010)

Remenyi et al. (1998) would agree with this approach and compares the research process to a "voyage of discovery". This means that the researcher may end up not only learning about the topic but about themselves also. As such this chapter sets out the methodology of my journey of discovery in to the use of the concept of gamification as a strategic HR tool. This chapter also outlines my mythological ideology and approach to answering my research question. As Thomas (2009) points out, a successful research project depends on the integration of the "purpose, questions, approach and methods" therefore this chapter will discuss what approach

and methods will be used and why they are the most appropriate to relate back to fulfilling the purpose of my research question.

## 4.2 Research Philosophies

The term research philosophy relates to "the development of knowledge and the nature of that knowledge" which contains "certain assumptions" on how you view the world (Saunder, Lewis and Thornhill, 2009). Burrell and Morgan, (1979) suggest that developing a philosophical perspective requires that the researcher make several core assumptions concerning two dimensions: "the nature of society and the nature of science". However Rosenberg (1995) argues that the importance of philosophical questions is even more significant in social science then in natural science. The reason for this is because the natural sciences have "a much more established body of successful answers and have many more established methods of answering them". Therefore when conducting research in social science, such as within this project, it is important to consider the different research philosophies to make an informed decision on the type of research to undertake.

However, regardless of the choices concerned with research design and method Bryman (2008) reminds us that the three most prominent criteria for the evaluation of social research, that must not be forgotten, are "reliability, replication and validity". Therefore the aim of the research within this thesis is to ensure that these three criteria are also met regardless of the research methods used.

In relation to the method of research used, Arbnor and Bjerke (1997) suggest that you can never "empirically or logically" determine the best approach" to research. The way that social scientists react to the complexity of social research differs due to the many variables involved. It is therefore important to discuss the influence of these variables and explicitly identify them to justify the chosen research method adopted. Furthermore, Easterby-Smith, Thorpe and Lowe (2002) give the following theoretical reasons behind the importance of exploring the philosophy of research as:

- "It can help the researcher refine and specify the most suitable research methods which will clarify the overall research strategy to answer the research question
- It will help the researcher to eliminate unnecessary work by choosing the appropriate methods in the first place
- It can help the researcher open up innovative methods for their research and areas to explore"

What this confirms is how the issue of exploring the philosophy of research is of particular relevance within this thesis. The area of gamification is such a new and emerging phenomenon that there is no precedence set for the most appropriate research method. It is also of particular relevance as the area is such an innovative concept within itself that the appropriate type of research must be applied to match the preferences of the likely readers of the topic also.

## 4.3 Research Approach

The approach to a research question is not simply a case of whether you "use this method or that method" (Thomas, 2009). It has a fundamental grounding in how the researcher thinks about the social world and the methods of research are hugely varied and complex. In this next section I am going to talk about the frameworks for thinking about these issues.

## 4.3.1 Paradigm

As discussed in the previous section, different research philosophies are influenced by assumptions and our personal view of reality. The technical word to describe the ways that we think about and research the world is paradigm. As stated by Creswell (1994) "The design of a study begins with the selection of a topic and a paradigm", furthermore Thomas (2009) suggests the idea of the paradigm is "particularly relevant to social science". Taylor, Kermodes and Roberts (2007) define a paradigm as "a broad view or perspective of something". The consequence is that data is interpreted differently by those operating within different paradigms. As paradigms can influence the overall approach taken to a research project the following paragraphs discuss the

potential approaches followed by a discussion on the actual approach taken for this thesis.

#### 4.3.1.1 Qualitative v's Quantitative Paradigm's

For many years it was generally accepted that there was a basic choice to be made when carrying out a piece of social research. The choice was between whether to carry out quantitative and qualitative social research. Newman and Benz (1998) state however that quantitative and qualitative "should not be viewed as polar opposites or dichotomies". Instead they simply represent "different ends on a continuum". The Quantitative Paradigm or world view on an approach to research typically follows the "natural" sciences of physics, chemistry and biology. However, those that advocate the qualitative approach in social science do so as research in social science is based on "human beings in social situations" and there is an huge element of "human consciousness, language and interactions between people in social situations" (Robson, 2011). The quantitative and qualitative paradigms have their origins in two particular approaches to knowledge – positivism or interpretivism. Research shows that for many years the dominant paradigm within social science was positivism but more recently this has been challenged by the interpretivism framework for thinking.

To explain the difference in more detail Thomas (2009) summarises that "for positivists, knowledge about the social world can be obtained objectively: what we see and hear is straightforwardly perceived and recordable without too many problems". If you hold a positivists viewpoint you believe that everything can be measured and studied scientifically. However, for those with an interpretivism view of the world and indeed social research, Thomas would say that "the world is not straightforwardly perceivable because it is constructed by each of us in a different way". An interpretivist's view of the world and of research requires and much more in-depth understanding of the variables influencing the research topic.

As the concept of gamification is still emerging and the purpose of the research is to gain a more in-depth understanding of this little known topic and its use in everyday business, it is therefore perceived that for this research thesis the interpretivism approach of qualitative research will be more appropriate than quantitative. Added to this, as Flick (1998) points out "qualitative research can involve the designing of an

approach that does justice to the complexity of the object under study". In this regard the object is not reduced to single variables but is studied in all of its complexity. This is a key point to make in relation to the justification of a qualitative approach to the research for this thesis subject matter. The concept of gamification is a complex subject rooted in a background of psychology, technological evolutions, and changes in the world of work, attitudes and expert views on revolutionary challenges to traditional method. Added to this the fact that qualitative research recognises "a researcher's interaction with the topic of study as part of the knowledge creation process". This is a critical point as the objective of this process is to develop new understandings on this little researched topic. This dynamic topic is grounded in the technology industry, one of the fastest moving industries at present. As time goes by throughout the completion of this thesis there have already been huge changes occurring within the field of gamification. As a researcher in this field I need to constantly interact with this topic of study to ensure new trends and changes are captured to ensure the knowledge created by the primary research is still valid and in line with the original secondary research gathered.

Also, importantly for this research topic, qualitative approaches "understand phenomena in context specific settings" (Golafshani, 2003) and these approaches are specifically helpful when analysing "the connection between theory and reality" (Kub and Eisend, 2010). It is this understanding of theory and reality that is one of the main research aims of this thesis as it attempts to understand the real world application of gamification theory v's analysts' predictions and reports of its use.

However, among the most cited criticisms of qualitative research are the presumed lack of reliability and validity of its findings. In regard to field research, critics question the "ability of qualitative research to replicate observations" i.e. the reliability or "to obtain correct answers or correct impressions of the phenomenon under study", i.e. the validity (Kirk and Miller, 1986). Other criticisms discuss the "reactive effects of the interviewer's presence" on the situation being studied and "selective perception or bias on the part of the researcher" (McRory, 2013). Also of concern has been the researcher's inability to "observe all factors that might influence the situation under study" (McCall and Simmons, 1969; Schaffir and Stebbins, 1991). For example, within this the information that is being gathered is through individual

forty minute phone conversations. This will give a snap shot of the interviewees overall perceptions and viewpoints but does not allow for the interviewer to witness the impacts first hand or gain in-depth knowledge of the business context for its use.

However, despite this it was viewed overall that the qualitative method of research would suit this thesis topic overall. The quantitative methodology is based on the positivist paradigm which in turn is based on "rigid rules of logic and measurement and absolute principles and prediction" (Halcomb and Andrew, 2005). In this study, such rigid rules and principles do not exist as the topic under study it not a widely used or known phenomenon as yet. This study is an investigatory piece of research to examine what the actual reality is and the interpretive paradigm of qualitative approaches is viewed as more suited as it is "associated more with the methodological approaches that provide an opportunity for the voice, concerns and practises of research participants to be heard" (Cole, Weaver and Olson, 2006). Qualitative research seeks to "discover the new and to develop empirically grounded theories" (Flick, 1998) and it is this relation of creating, expanding, modifying and testing the theories of gamification that are the grounding for this qualitative research project.

#### 4.3.1.2 Ontological Consideration

As Thomas (2009) suggests thinking about ontological considerations when conducting research "helps you to consider more deeply what you are asking in your research question". Spending time on ontological considerations helps a researcher to scrutinise more closely the information he/she is writing about. It supports more critical thinking and questioning of the knowledge gathered or information displayed in any research project. Bryman (2008) reminds us that "ontological assumptions and commitments will feed into the ways in which research questions are formulated and carried out". Being aware of whether you believe the social world is regarded as "something external to social factors" or as "something that people are in the process of fashioning" as Bryman explains will enable the researcher to uncover how their perceptions impact on how research is displayed. This is particularly pertinent in relation to the research on this topic as the concept of gamification has grown and is positioned as the latest and greatest phenomena released from Silicon Valley. It may be easy to get sucked in the "game tsunami" (Reeves, 2010) as game-based solutions are positioned as a prolific new discovery that will change the world we live in. We all

want to have some part of the success that certain technology organisations have achieved and there may be a tendency not to stop and ask if this is something completely new or just a cool new word for principles that have always been there. As a researcher on this topic I must ensure I am not swayed by biases of those that are currently using or promoting the concept through the way the research questions are formulated or carried out.

#### 4.4 Research Method

#### 4.4.1 Case Study

The qualitative research method to collect the data for the primary research will be gathered under the design frame of a single phenomenon Case Study. A basic case study entails "the detailed and intensive analysis of a single case" (Stake, 1995). As Thomas (2009) offers the aim is to gain "a rich, detailed understanding of the case by examining aspects of it in detail". The particular circumstances surrounding the case of the concept of gamification within HR processes to increase employee engagement, is one that is of special interest as little theoretical or academic research has currently been conducted into this topic. As this concept grows within the business world, naturally the amount of research is growing however further in-depth understanding is crucially required to support its early stage growth success. Furthermore it is felt that this method of data collection is of particular relevance given Yin's (1984) definition as:

"The case study is an empirical enquiry which investigates a contemporary phenomenon within its real life context when the boundaries between phenomenon and context are not clearly evident" (Page 18)

Stake (1995) proceeds that "we study a case when it itself is of special interest". The case within this thesis is the concept of gamification. As the concept of the traditional employee-employer psychological contract starts to evolve so to must the mechanisms used to engage employees in their work on a day to day basis. In the technology driven world of today the application of gamification mechanics is being heralded as a breakthrough solution and intervention for this issue. Industry analysts predict unprecedented growth of this concept in the foreseeable future; therefore I believe there is huge justification for research in to this as a special interest topic.

Yin (1984) further suggests that there are three conditions that determine the type of research strategy used for any research projects. These are outlined in the table below:

Strategy	Form of research question	Requires control over behavioural events?	Focuses on contemporary events?
Experiment	How, Why	Yes	Yes
Survey	How, what, where, how many, how much	No	Yes
Case Study	How, Why	No	Yes

Table 4.1: Conditions to Determine Research Strategy used for any ResearchProjects

In this, "How and why" questions are more exploratory by nature which indeed is the main aim of this research, to explore the new and little known research topic of gamification. There will be no control over the behavioural events to gather the data needed and it is indeed the case that this focuses on a contemporary event which gives further merit to this form of research being the most appropriate under these circumstances.

So once a case study approach is decided upon, whatever kind of case is involved, there is always the need "to follow a framework for research design" (Robson, 2011). Robson proceeds to say that the degree of flexibility of design will however vary from one study to another. Within this thesis topic, the main purpose of the research is exploration into a unique topic therefore the approach should be quite flexible. Robson states that if you are trying to get some feeling as to what is going on "in a novel situation where there is little guide on what one should be looking for" your initial approach should be "highly flexible". This approach to the research framework would thus be considered appropriate for this research project while still holding true to the need for structure to conduct and organise the research successfully. Several procedures and techniques are available for conducting case study research successfully. However, Creswell (2007) offers the following approach to conducting a case study:

- First determine if a case study approach is appropriate to the research problem
- Second, identify the case or cases. These case may involve, an individual or several individuals however purposeful sampling must prevail
- Decide on the method for data collection
- Decide on how to present the analysis of the data

# 4.4.1.1 Determine if a Case Study Approach is Appropriate to the Research Problem

This step in the approach has been discussed in some detail above. Overall as Yin (2009) tells us "there is no formula" for knowing that you should use the case study method but as the research question within this thesis seeks to explain "how or why some social phenomenon works", that of gamification, it is seen that this is an appropriate approach to the research problem in question.

#### 4.4.1.2 Identify the Case or Cases

#### 4.4.1.2.1 Single or Multiple Case Study Design

When deciding how to select the cases for a case study Yin (2009) explains that the most important element is to "have sufficient access to the potential data". As part of this one, of the main decisions is to decide whether to conduct single or multiple case study designs. This basically means that a decision needs to be made prior to the collection of data on whether single or multiple cases are going to be used to tackle the research question. It has been decided for this topic that a multiple case study design is more appropriate. As the aim of the research is to test and question a conceptual model - for how gamification can be used to increase employee engagement therefore competitive advantage for an organisation -it is viewed that the validity of the results will be much stronger if multiple cases are examined to provide a more holistic view. Herron and Firestone (1983) would agree that evidence is often much more "compelling "and "robust" from multiple case examination. According to Yin (2003) when examining multiple cases each case is treated as a single one but each case conclusion can be considered in the light of a collective case phenomenon. This approach will enable the exploration of differences and similarities between the real life experiences of current users of gamification to draw a holistic and comprehensive conclusion to the test of the conceptual model.

#### 4.4.1.2.2 Intrinsic or Instrumental Case Study

Furthermore the intent of the analysis of each case is of intrinsic interest to support the overall conclusion of the research question. This means that each of the cases themselves are of primary not secondary interest to the overall finding and conclusions. The intrinsic case is often exploratory in nature, and as the researcher is "guided by her interest in the case itself rather than in extending theory or generalising across cases" Mill (2010) this is deemed critical to form an in-depth conclusion to this little researched topic.

#### 4.4.1.2.3 Purposeful Sampling

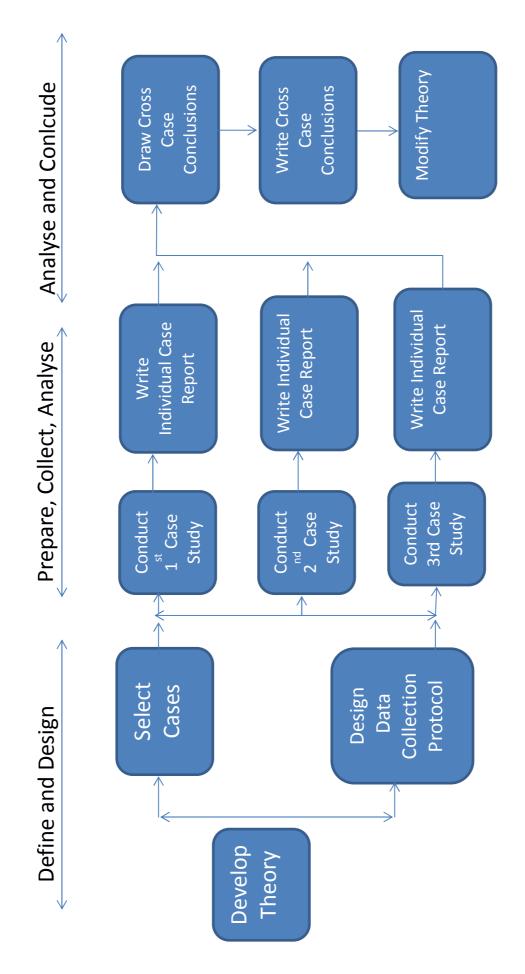
As Thomas (2009) states, critical elements in deciding the design for a research project include answering the simple questions of "what resources do you have available, what people do you have access to and what kind of expertise can be called upon to support you". Purposive sampling, based on reviews of the literature and knowledge of the subject area, have been used to select cases under study, rather than as an attempt to observe or collect data from all respondents, who may be affected by the phenomena under study. However it is replication not sampling logic, as proposed by Yin (2003) that will be used in this research. Replication involves duplicating the types of conditions under one experiment to see if the same result is achieved in another. In this circumstance it will be about finding cases where replication can be carried out to provide general themes and agreements to conclude the research in to the conceptual model that is being proposed to conclude a valid result. As Yin (2003) explains if a sample of 6-10 cases turn out to have similar agreements and themes on aggregate, this would provide "compelling support for the initial set of propositions". The replication logic differs from sampling logic in that sampling logic requires "an operational enumeration of the entire universe or pool of potential respondents and then a statistical procedure for selecting a specific subset of respondents to be surveyed". The difficulty with this approach for this thesis lies in the fact that this is an emerging topic. There is no register of gamification users, no society to contact to get a clear understanding of the organisations that are using the concept to date. As an emerging and infant industry, as a researcher the first step was to start out with a blank piece of paper to discover who in fact were these organisations that had adopted gamification methodologies. Not forgetting that one of the primary aims of this research is to provide the missing evidence from real life users and question the

reports currently being made by industry leaders, analysts and gamification platform users. One of the main aims is to find out who the companies are that will help this grow to a \$2.8 billion business by 2016 and who in fact are the 70% of the top global 2000 businesses who will have at least one 'gamified' application by 2014 as is being claimed?

The reality has been that in fact the process of compiling a list of current users of gamification has been one of the most time consuming and difficult in this entire thesis process. At this current phase in the lifecycle of gamification is has proved extremely difficult to source current user contacts within organisations currently using gamification within HR processes. Therefore it is the replication logic over sampling logic that is seen as feasible to represent the data available at this time to assess the prevalence of the phenomena at this stage of its life cycle.

The replication approach to multiple case studies proposed by Yin (2003) is illustrated in figure 4.2 below. The first step indicates the need for theory development; this is set out in the literature review section of this thesis and converges in the conceptual model that is to be tested in the case studies. Each individual case study is then conducted with the conclusions for each used to form part of the replication processes for the next case. The final analysis and conclusion will draw a cross case conclusion which will then feed in to the modified conceptual model to provide a modified and tested model for use.

When using a multiple case study design the next question to address is in relation to the number of cases that are deemed necessary for the study. Yin (2003) advises that this is not based on any formula but is a matter of "discretionary, judgmental choice" but advises that if you want a "high degree of certainty" you may press for five or six replications.





#### 4.4.1.3 Decide on the Method for Data Collection

Creswell (2007) gives guidance on the methods of data collection to support the case study research strategy. These include "observations, interviews, audiovisual material and documents and reports" to report the "case based themes". Furthermore the complete list of sources also includes photographs, films, psychological testing, life histories and street ethnography. Yin (2003) offers a useful overview of the six major sources. A summary of these can be seen in table 4.2 below:

Source	Advantage	Disadvantage	
Documentation	Stable, Unobtrusive, Exact	Retrievability, Reporting Bias of	
		Author, Access	
Archival Records	Stable, Unobtrusive, Exact	Retrievability, Reporting Bias of	
		Author, Access	
Interviews	Targeted, Focused on topic,	Bias, Reflexifity	
	Insightful		
Direct Observation	Reality, Contextual	Time-Consuming, Cost,	
		Reflexivity	
Participant Observation	Insightful in to interpersonal	Time-Consuming, Cost,	
	behaviour	Reflexivity	
Physical Artifacts	Insightful in to cultural features	Selectivity, Availability	

 Table 4.2: Six Sources of Case Study Data Collection Yin (2003)

Within this thesis the data collection method will be by way of semi structured interview. When comparison is made to the other most popular forms of data collection for case study research, interviews are the most practical and most effective for this particular topic of research. Simply, documentation and archival records for the area of gamification do not exist due to the fact that this is an emerging topic. Direct and Participant Observation, although a rich source of impartial data are not possible due to the fact that there are no know users of gamification within Ireland. Therefore significant travel would be necessary to identify the subjects of the cases.

Also, the semi structured interview is seen as particularly appropriate in this circumstance as within qualitative case study interviews "each interviewee is expected to have had unique experiences, special stories to tell" (Stake, 1995). This will prove particularly useful in this unique and little researched topic as this thesis itself is a voyage of discovery in to the concept of gamification for individual organisations. There is no proven formula or framework for how it should be integrated in to organisations, therefore having the freedom to gain insight in to a user's unique experience will prove highly valuable for the reader. However as per appendix 3 number of issues orientated questions will be prepared in advance. The purpose of the

questions is not to receive yes or no answers but to create linkages, gather themes and find out useful information that will support an answer to the research question. At all times the research question needs to be in mind throughout the interview.

There are issues however to be aware of when conducting interviews and amongst these are the art of "formulating questions and anticipating probes that evoke good responses" (Stake, 1995). Caution will also have to be upheld also to ensure the weakness of " bias due to poorly articulated questions , response bias, poor recall and the interviewee giving what the interviewer wants to hear" do not hamper the results.

Litosseliti (2003) also warns that a researcher must be careful about taking participants words at face value and recommends considering them on their "broader socio cultural context".

#### 4.5 Research Methodology Summary

In summary, the purpose of this chapter entitled research methodology is to outline the overall strategy adopted to the primary research to answer the research questions posed in this thesis. It began by outlining that the overall technique implemented throughout the writing of this paper is more cognisant of the research spiral approach than a systematic linear approach to research.

Due to the emerging nature of this topic, as with any new emerging game changing topic or technology in today's fast paced business environment, the type of information available has been as dynamic as the topic itself. Throughout the year of researching for this paper new studies and academic research has been published to change the course of the exact nature and aim of this research. In this respect a flexible attitude that was open to changes in direction needed to be adopted. However, regardless of this the traditional approach to reviewing research philosophies that comes hand in hand with any research project may indeed be said to be of more relevance than ever as a result. Exploring the theoretical reasons behind the philosophy of research helped to define and specify the most suitable research strategy and method to answer the research question within this relatively new topic of research.

Overall the aim of this chapter was to outline the design of the research strategy and the techniques to be used to gather the research evidence and to justify the use of these over other options available. As data is interpreted differently by different people serious consideration was given to the potential approaches that could be considered for data collection. Although many researchers view quantitative research design as the best approach to scientific research because it gives precise measurement and analysis, this approach was not considered appropriate for this research paper. Although considered subjective; when dealing with the focused topic and samples available to answer this research topic, the qualitative approach was seen to be a much more appropriate approach for the primary research strategy. The interpretivist view of the world that looks beyond numbers and percentages, which just aren't there in this explorative and emerging area, gains an understanding of the feelings, impressions and viewpoints of smaller highly targeted samples. The exploratory nature of this research in to a developing topic did not lend itself well to a research approach based on the principles that all information can be measured and studied scientifically. Due to its investigative nature this research lent itself much better to a research approach that believed that not everything is straightforwardly perceivable and an approach that gives a much more in-depth understanding of the variables that influence the research topic. Furthermore the nature of qualitative approaches to understand context specific settings in how theory and reality connect is critical to the testing of the conceptual model that forms the backbone of this research. Qualitative research in particular lends itself well to creating, testing and expanding theories without rigid rules and constraints.

So once the qualitative research strategy was chosen the next choice was to decide upon the design frame or strategy for the method of data collection. The design frame chosen for the collection of data was the Case Study method. The case study approach is used primarily to investigate contemporary events that are of special interest. This thesis is a piece of exploratory work in to a phenomenon that is viewed to radically change the way companies engage with their employees. A case study strategy fits this research context as at its core a case study is an empirical inquiry that investigates a phenomenon within its real-life context. It was decided that the best of both Yin and Creswell's approaches to case study research would be incorporated into the framework for the research design. Firstly, Creswell's approach is used to frame the overarching structure to conduct and organise the case study. However, within the requirements of this structure a decision needs to be made to conduct a single or multiple case study approach that meets the parameters of purposeful sampling. For this thesis a multiple case study approach was decided upon. This means that multiple cases were examined to enable the exploration of differences and similarities between real life gamification experiences to draw a holistic and comprehensive conclusion to the conceptual model. One of the most time consuming parts of conducting this research has been the ability to identify and connect with actual end users of gamification mechanics within the context of this thesis. Many difficulties were encountered along the way. Therefore the decision was made to follow Yin's replication approach to prepare, collect and analyse the case study research and findings in order to present a robust conclusion. This change in approach was adopted as it is fair to say that even the industry leaders and gamification platform suppliers were not forthcoming in identifying end users that could be contacted to participate in the primary research. In order to overcome this and in order to collect sufficient amounts of data it is the replication approach and not the sampling logic that will be used for this research to conclude a valid result. The replication logic allows for the researcher to concentrate on 5-6 key cases to aggregate similar themes and agreements to provide compelling data for a phenomenon at this stage of its life cycle.

## **Chapter Five: Research Findings**

### 5.1 Introduction

The purpose of this chapter is to summarise the findings of the primary research case study analysis. A multiple case study strategy was decided to be adopted to gather field evidence of the experiences of the early users of gamification platforms within the context of employee engagement. The replication approach to multiple case studies proposed by Yin (2003) and outlined in figure 4.2 on page 37 above will be integral to the presentation of the empirical evidence in this chapter. The outcome of this chapter will support the Validated Model of How the HR function can use gamification as a strategic tool to gain Competitive Advantage for an organisation, which will be outlined in chapter six. To support this process the findings of the individual replications are presented in line with the different elements that make up the Conceptual Model (Figure 2.1, page 23).

#### 5.2 Findings of the Case Selection Process

A multiple case study design was considered the most appropriate in this circumstance to make the most compelling and robust examination of information available to study the differences and similarities between the real life experiences of current users of gamification to draw a holistic and comprehensive conclusion to test the conceptual model. According to Yin's replication logic, in order to ascertain a high degree of certainty amongst cases; it is advised to press for five or six replications or cases to examine. The first step in this process was to identify current users of gamification platforms within enterprise human resource departments. Currently no user register, list, society or professional association for gamification exists so this information is not easily identifiable. The strategy adopted in order to overcome this was to consult a number of different sources uncovered in the secondary research process.

#### 5.2.1 Gamification Platform Vendors

The first source of information was from the Gamification Corp website (http://www.gamification.co/, 2013). This site is recognised as the leading source for gamification news and information. This representative body holds the annual G-Summit or Gamification Summit where all the global thought leaders, industry experts and platform vendors congregate. This forum publishes a list of the top gamification vendors globally. These vendors either supply gamification platforms for customer or employee loyalty. A full list of the companies and their specialisations can be seen in Appendix 1. The objective of contacting these organisations was to request access to their clients and therefore gamification end users. Of the sixty vendors identified, only twenty of these vendors offer employee engagement platforms, all the others concentrate on customer engagement platforms. This within itself is an insightful piece of information as it shows the overarching concentration for vendors currently is not within the HR marketplace. Furthermore of these twenty vendors, eleven were contacted for access to some form of client contact in the interest of conducting research that may in the end support the case of these companies having tangible evidence to support the use of gamification platforms with the HR function. In total only one positive response was received offering an open invitation to contact their clients. That company was an Indian based company called Emee.

# 5.2.2 Gamification and the Future of the World of Work Thought Leaders

The official Klout score for gamification Thought Leaders is published at http://www.leaderboarded.com/gurus. Klout is a globally recognised organisation that uses social media analytics to rank individuals according to online social influence via the "Klout Score", which is a numerical value between 1 and 100. In determining the user score, Klout measures the size of a user's social media network and correlates the content created to measure how other users interact with that content and therefore how influential your opinion is within your subject matter of expertise. Five of the top ten gamification thought leaders were contacted with a request for support to identify organisations to participate in the primary research for this project. Only one positive response with an offer of support was received, from Mario Herger.

Added to this, many thought leaders and speakers, bloggers and those positioning themselves as experts in the field of gamification and its growth potential were also contacted and offered to participate in the research. All refused to participate due to the lack of contacts for real world gamification platform users. Others simply did not respond.

## 5.2.3 Industry Analysts and Professional Services Organisations

Throughout the process of researching for the literature review on this topic many global consulting firms and industry analysts and research firms were identified for publishing research and opinion papers on the topic of gamification within HR. However, when these global firms such as Capgemini, Accenture, Deloitte, Bersin and M2 Research were approached to participate in the primary research for this topic, again their ability to connect me with actual end users proved unsuccessful.

Equally contact with the "Gamification Research Organisation" and the consulting firm "HR Gamification" proved ineffective. Contact with the "Serious Games Association" however did prove successful.

# 5.2.4 Organisations Identified as users of Gamification Platforms for Employee Engagement

Despite all of this there is hard evidence that tells us that some of the Top Fortune 500 organisations are currently deploying gamification platforms within their HR processes. A full list of those identified through this research can be found in Appendix 2. However, those that were contacted through the course of this research proved very difficult to contact and connect with. Numerous efforts were made with a number of these organisations, given the restriction of time frame and resources for conducting this research. However, organisations were either reluctant to participate because of corporate restrictions or were unwilling to speak for unknown reasons.

## 5.2.5 Cases Selected

Due to the time and resource constraints on this thesis and due to the difficulties encountered in accessing end users that are outlined above; five cases have been identified for the basis of this research. These five cases have been chosen as good representative case replications because of the global nature of the businesses, the length of experience the organisations have with using gamification platforms for employee engagement and the contrast in the size of their business giving a representation from smaller and large organisations. The cases are outlined in table 5.1 below.

**Interviewee**: Tarun Sharma VP R&D and CEO **Company:** BMC Software **Interview Date:** 9<sup>th</sup> July 2013 Length of Interview: 37 minutes 12 seconds Number of Employees: Globally 6,500 Global Revenues: Fiscal 2012 - \$2.2 billion Interviewee: Naureen Meraj, Global Lead for Gamification Centre of Excellence and Employee Engagement **Company:** NTT Data **Interview Date:** 10<sup>th</sup> July 2013 Length of Interview: 40 minutes 30 seconds Number of Employees: 60,000 **Global Revenues:** Unknown Interviewee: Sameer Bendre, Chief People Officer **Company:** Persistent Systems Ltd **Interview Date:** 15<sup>th</sup> July 2013 Length of Interview: 37 minutes 53 seconds Number of Employees: 7,000 **Global Revenues:** Unknown

Interviewee: Abhijit Atre, Finance & Shared Services Manager

Company: Redknee Technologies

**Interview Date:** 18<sup>th</sup> July 2013

Length of Interview: 31 minutes 34 seconds

Number of Employees: 200 in India

**Revenues:** 2012 performance resulted in a turnaround to a net income of \$5.3 million from a net loss of \$1.6 million in 2011.

Interviewee: Erika Webb, Senior Manager, Applications User Experience

Company: Oracle

**Interview Date:** 18<sup>th</sup> July 2013

Length of Interview: 51 minutes 21 seconds

Number of Employees: 10,000 approximately

**Revenues:** €13 billion

## Table 5.1: Cases Selected for Research

## 5.3 Individual Case Reports

## 5.3.1 Case 1 Report: BMC Software

Interviewee: Tarun Sharma VP R&D and CEO

Number of Employees: Globally 6,500

Global Revenues: Fiscal 2012 - \$2.2 billion

## 5.3.1.1 Overview

At BMC Software the concept of gamification first came to light two years ago. There were two primary areas that were business drivers for looking at its use within the company.

• The first was to influence the behaviour of their own employees and to find a way to get employees to behave in a way that was not based purely on just how their managers were telling them to behave and

• The second was how to influence their customers and their knowledge of the organisation

For the purpose of this case study, the first business driver was the focus of concentration.

The company also very quickly became fascinated with a popular social trend, that of the "quantified self". The concept of the quantified self was best explained by Tarun through the example of the Apple App that so many people are now using to gather information in real time on their daily wellbeing issues; such as how many hours sleep they have, how many steps they walk and what foods they have eaten. The idea of this app is that individuals use it to compare themselves to other people and see how they "map" against them. As a result what this app is doing is motivating people to try to improve their scores on a daily basis to help them to lead a healthier lifestyle. This is all being done without an external push from anyone; it is solely based on a person's internal desire to do better than they did the day before or be on par, reach or be better than the social norms. Tarun continued to say that this concept has become quite addictive for people and so he wanted to see if the concept could be applied to people at work.

#### 5.3.1.2 Achievement and Progression

From the concept above, Tarun used the theory of gamification to make this possible for his Global IT helpdesk support operation.

One of the largest products that BMC has is a product called "Remedy". This system is used all around the world to track IT helpdesk support calls. When you put in a helpdesk support call with your IT department or provider you receive a ticket and when your call is answered your ticket is closed. What they have done through gamification is to create leader boards for people who are answering these calls. At the moment Tarun told me that you can expect an average service desk person to close at least 10 tickets per day. What they have done is gather the data on how many people are closing a day and who has the most, they then set up a live real-time leader board with this information that everyone can see. What this leader board does is create a sense of competition amongst the service desk individuals. Each individual receives a dashboard of information that maps them with leader board information.

What makes this powerful as Tarun explained is how this impacts on an individual's personal performance. As Tarun stated "you will see that the top guy has closed 20 tickets today and I have only scored 10 and you will start to ask yourself, what can I do to do more than 10". The bottom line figures become really powerful however is the "ripple effect" that this has throughout the whole organisation.

#### 5.3.1.3 Social and Collaborative Organisational Culture

Tarun continued to explain is that this can be taken a step further to enhance the overall organisational effectiveness also. Tarun explained that they gave people points for the number of tickets they closed in a day however they pushed this further so people are not only getting points for closing tickets. For example if a service desk operative writes and publishes an internal article about what the problem was and how you solved it, then they get extra credits. What is happening now is that the leader board is not just about singular activity; it is helping the organisation as a whole to uplift itself because what is happening is that the information is flowing more freely between people. If the same issue occurs again the service desk support person can quickly look up the article and the information is available to solve the problem faster.

Furthermore as more and more data is gathered and now visible to everyone, the company can see what problems keep occurring and it can use this to look at a way of automating the problem. And if as Tarun states "we automate it the organisation gets huge benefit than just solving it manually". What you are doing said Tarun is "creating behaviours that help the whole organisation and not just you or your department".

#### 5.3.1.4 Intrinsic Motivation

A key area driver for introducing the concept of gamification is based around the theory that gamification gets people to behave in a different way that is not management driven and where there are rewards associated with it that are not monetary. Tarun explained that they had done a lot of analysis and figured out that monetary rewards were good but they do not really cause employees to behave in a

certain way and certainly did not get the desired levels of productivity or engagement. They felt they were a good thing but they are not designed to get people truly engaged in the organisation. As Tarun continued "on the other hand if you can somehow link what they see as a reward in some sort of a competitive stack with their peer's people tend to behave different".

What they did was to launch a platform called "Ninja Club" to help them to this with their 1000 programmers.

The business issue was that every single programmer wanted to become a manager within the business a few years previous. Employees felt that the only way for them to grow was to become a manager at some point. The business wanted to get them to start thinking different as not everyone could become a manager. The idea behind ninja club started with campaigns to explain to the programmers how they really like martial artists or doctors. The idea behind this was that a good doctor does not associate his success with him being the CEO of the hospital. As Tarun says "a good doctor is a good doctor because he can do complicated surgeries, he is well read and well written, he has patients that come from far and wide to get treated by this person, and he is sought out by his peers for advice. It has nothing to do with management". Ninja club was created to be "a game against you" that is focused on getting the programmers to take great pride in being programmers or being technical.

They used the virtual platform of Ninja Club which allows the allocation of virtual gifts to be given to drive the behaviour they want. As Tarun explained "for example if you have a programmer that went and did a speech externally he gets 500 points or if he does a speech internally he gets 200 points. All of these points can help him buy virtual things on the site". Tarun explained that all of these things had no monetary value but when a colleague looks at someone else's site and it has much more on it than he does the perception in the business is that "this guy must be very smart".

Tarun explained that there is no money involved but how you live and how many virtual rewards you have is a giveaway of how smart, active and intelligent you are amongst your peers and this encourages people to become even more expert and demonstrate their capability and influence internally. The platform is seen as a source of recognition and growth of expertise. Their technical team can connect with "likeminded people" to enhance and their skills and to participate in business related issues and problems that are of common interest irrespective of their current assignments.

## 5.3.1.5 Continuous Feedback

Through Ninja Club, not only are people becoming intrinsically motivated in their organisation and supporting it to grow there is also the opportunity to mentor others and receive kudo's from others, who possibly are people whose level of expertise you look up to in the organisation or are at management grades that you aspire to me at. Tarun explained that there is "an inherent belief that a lot of engineers are not very socially developed. They may be very happy sitting in a corner cubicle programming but if you ask him to go and interface with 10 people he might find it a bit challenging". However, what they have found is that the same programmer has a different persona in the virtual world. Tarun sated "he may be an introvert but if you are friends with this person on Facebook you see a completely different personality. The guy is actively chatting and is putting up pictures, he is a cool guy. We believe some people express themselves differently in the virtual world then they do in the real world". So through the use of the virtual platform of Ninja Club people can express themselves virtually. Through the platform they can award others with instant gifts and credits, thank you's, feedback and accreditations that helps them to build their virtual profile. This will increase the internal perception of them further which in turn increases their engagement in the organisation and intrinsic motivation further.

#### 5.3.1.6 Other Noteworthy Findings

#### 5.3.1.6.1 Attracting and Retention of Next Millennial Generation

Clear evidence was demonstrated by Tarun that having innovative engagement techniques is imperative amongst his social media savvy 20 something year old employee group. The concept of gamification does not affect the mainframe part of their business where employees have an average age of 60. Tarun commented that the people in general who are filling jobs in the growth and high employment sectors in India, such as in call centres, are very young people. The demographics of the workforce in India are that they have one of the youngest workforces of all countries. As a result of this Tarun believes that in India gamification is here to stay because the next generation of workforce is going to be very young, very technology savvy and

they are very comfortable with social media and social media type apps and work practices need to adapt to that to attract the right talent to support their competitive advantage. Furthermore, Tarun believes that this is a critical area of importance for the growth of gamification. He stated that "what needs to be considered is at what age will people start to look at gamification and start to roll their eyes. There are countries that I can think of that if you start to roll out gamification in, it won't work because the average age of the workforce is too high. It is certainly something that will work in younger countries better".

# 5.3.1.6.2 Tangible Evidence of Direct Impact on the Bottom Line and Competitive Advantage

When asked for Tangible evidence of impact Tarun gave one example in relation to work productivity. "I have already seen our work productivity increase by 45 minutes per day without people spending the 45 minutes extra at work. This means that they are being more productive. When you start to compute that the numbers start to run in to millions of dollars. We have over 1000 programmes and you can do the math and see how it adds up. It is driving productivity also for our engineers at a reduced or same cost".

A second example was in relation to the competitive advantage is achieved through the insight that his gamification concepts have given him on how his talent is spending their time during the working day. Tarun used gamification data to evidence that the top 20% of employees in the organisation worked 10/12 hours a day but the bottom 20% only works about 2 hours a day. The average works 5.5 hours a day, even though they come to work for 8 hours a day. Tarun realised that if he was able to get their productivity up to 6.5 hours a day that would be incredible. But also the biggest jump would come to the top 20%. His rational is that the reason they have to work so much extra is because the bottom 20% is doing so little. So if we could take the burden off the top performers with the same productivity then their work life balance has increased so much then if we weren't doing this. So for him it was more about doing the right thing for their top performers to ensure that they could retain them in the business to support the edge that the company needed competitively.

#### 5.3.1.6.3 Gamification Link to Business and HR Strategy

When asked about the importance of linking gamification concepts to a relevant business strategy and the HR strategy Tarun was adamant that gamification needs to be linked to the organisation from the start because "if you don't and it doesn't work all that you have done is increase your operational cost for no rhyme or reason". A key element to Tarun was being able to demonstrate measurable business value "I think that it is so important to have some data to put forward for your business case because going just by your gut just doesn't work. You have to be able to quantify business value to justify the expenses".

#### 5.3.1.7 Final Thoughts

Tarun believes that in his experience the big difference is that you have a mechanism using gamification to make people behave a certain way without having to give them monetary benefits. As Tarun states "what drives me to beat my wives score is my competitive spirit not that I get extra money or that I necessarily have the highest score".

He believes that through leaderboards if employees see that they are nowhere near the top that makes them feel competitive so the whole gamification concept is based on true behaviour change by making someone aware of where they stand. He feels an important contribution that gamification is making is giving people sight of what the best guy did and so it constantly reinforces what is the right thing to do and for people to up lift themselves without the organisation having to do anything for them. "It is about making people aware. Give them the metrics that they need, tell them what an ideal state looks like or what the best person has done so the person can calibrate him or herself and figure out if they can do something better". Tarun believes that the benefits of that are already known to people "for example the benefits of stopping smoking are known to the guy but. In the same way I already know the benefits of doing well at work, I will get promoted or get more money etc. the benefits are already clear. Where people really lack is that drive and motivation needed to take them over". Tarun's experience has shown him that it is this constant reinforce back to people on how they are doing without someone else telling them really helps because them they are self-motivated and self-driven and "it's as simple as that".

#### 5.3.2 Case 2 Report: NTT Data

Interviewee: Naureen Meraj, Global Lead for Gamification Centre of Excellence and Employee Engagement Number of Employees: 60,000 Global Revenues: Unknown

#### 5.3.2.1 Overview

Naureen's first introduced NTT Data to gamification through offline initiatives that revolved around game theory. She introduced an offline team building concept but gamified the strategy to make the employees feel like they were part of the solution and to create an environment where employees could feel that they could be candid enough to participate in conversations but yet compete with each other to come up with the best solutions to business problems. They quickly realised that the competition factor, gaining points to come up with ideas, the essence of game mechanics, motivated people. When they later used their ideas in the business employee's felt that their voice was heard and they feel recognised and they were part of coming up with the solution. When the organisation saw the success that came from that initiative and its success on providing innovative solutions the CTO looked at introducing a gamification strategy to the business. In the subsequent 18 months to 2 years' time frame gamification has been a proven solution to provoke enthusiasm and promote higher innovation in the organisation.

#### 5.3.2.2 Achievement and Progression

NTT data developed the "Ignite" gamification platform to support the business issue that arose when people needed better training to support their career progression. They knew also that people wanted to be recognised and rewarded as they improved their skills and became better leaders. They developed a leadership game where employees gain points for participating in certain modules and develop their leadership skills. Employees love being able to track their progress and receive instant feedback from their managers. Also however management can also track how people are doing in their development and how they are completing modules and which enables them to pick contenders for different promotions and opportunities in the business.

#### 5.3.2.3 Social and Collaborative Organisational Culture

In 2010 NTT Data recognised that they had issues with engaging people in the org with their everyday tasks. They wished to find a way to get them to be more engaged with their work, enjoy their work more and be more innovative in their work. As a consulting organisation they realised that people were not collaboration. They were showing the typical symptoms of consulting environments, where large numbers of people working on large accounts feel they are off on their own island, they feel disconnected from the parent company. Employees were seeing themselves more as part of the client environment then the parent company. In 2010, they attempted rolling out a solution called "Socially" to address these issues but only got a dismal 20 out of 7000 employees to participate. After five months of constant badgering, NTT DATA was able to marginally raise their active users to about 420 users. Clearly, this wasn't working — that is until Naureen Meraj and the CTO decided to incorporate gamification into the collaboration system. The platform gained an enormous shift in momentum and jumped up to 4000 monthly active users after only six months. Through the use of well-designed challenges, badges, leaderboards, social elements, and prizes, Naureen and Imran were able to completely transform their paltry social portal into the company's main collaborative platform that connects 35 countries together across the world.

#### 5.3.2.4 Intrinsic Motivation

Evidence was found within NTT Data of gamifications contribution to intrinsic motivation via a discussion on the sales game they have for their sales community. The business found that it was struggling to get sales people to learn about, promote and sell its new products. They stuck to what they knew best and what was guaranteed to get them their quota and then their commission cheque at the end of the year. NTT Data needed them to feel more comfortable with new products to enhance their competitive advantage through cross selling and gaining deeper relationships with clients to support their needs. They built a training game that could be accessed on a mobile phone where sales people could gain points for going in to the module to learn about the new products, completing a quiz on it and selling it. As the sales people earned a commission they realised they needed to incentivise them by offering them things with intrinsic value that would incentivise them to learn more about new products and services. They have found that people are incentivised on the game to achieve non-monetary awards such as the chance to go to an exclusive conference or recognition from or lunch with the CEO. "They value things that really get them in the limelight as an expert in relation to a certain product or a certain offering". People are motivated to stay on top of this game as are now seen as experts and Naureen has seen that "when you are motivated to do something from your own internal place then that becomes a self-motivator". This want to sustain the recognition the sales people are receiving has come about only since the introduction of this sales game and is a phenomenon that they have never experienced before.

#### 5.3.2.5 Other Noteworthy Findings

#### 5.3.2.5.1 Attracting and Retention of Next Millennial Generation

In this case there is no evidence to suggest the link between the use of gamification and the attraction of millennia's. Naureen believes that gamification is something that is more popular and more familiar with the younger population as opposed to people who might be in their 50's but she offers "you would however be surprised because the average gamer is actually 38-39". Naureen believes that at this stage of technology most employees grew up with some kind of gaming experience and they understand the engaging factor behind it and so they are fairly open to utilising it especially when you can make it relevant to a business process. So it varies, it's across the board

# 5.3.2.5.2 Tangible Evidence of Direct Impact on the Bottom Line and Competitive Advantage

NTT Data have recorded some impressive data to show the impact on the bottom line and they agree that this has a direct result on their organisations competitive advantage in the marketplace. Examples include:

- Ownership: Emergence of two new Centre of Excellence based on work being done offshore
- Productivity: Reduced India attrition rate by over 50%

- Business Process or Product Improvements and Enhancements: Increased employee referrals of innovative ideas by 30%
- Increased collaboration and Knowledge Sharing
- "Socially": from a few hundred to 4000+ active participants
- Innovation: Laid out the groundwork for new initiatives
- "Smart idea challenge" generated over 300 new ideas resulting in capacity for client at no additional cost.
- Over \$10m in revenue and cost savings for the client.

## 5.3.2.5.3 Gamification Link to Business and HR Strategy

Through her experience at NTT Data, Naureen believes that gamification needs to be a "wedge offering" or "another layer" that is added on top of other business processes and needs to be aligned with the businesses policies and procedures.

Naureen is adamant that one thing that has to always be clear when leveraging gamification is that there has to be certain objectives that you are trying to obtain. As Naureen states "you can gamify everything and anything but if there is no clear purpose as to why you are gamifying it and what kind of outcome you are trying to gain then it is not going to work". The word of warning comes to not just fall for it as the newest buzz word as if it is not leveraged correctly or used appropriately it will not work.

In Naureen's opinion what gamification does is support with pain points that occur in any normal business process. For example if something is not being done in a timely manner or something is not efficient because of certain obstacles, gamification can make it so that the user is incentivised to pay more attention to something to enhance the flow in the business process. Naureen was clear that where it is going to find success is where "you make sure there are clear objectives on what you are trying to gain, you have measurable metrics that you will use, those types of things to make sure it is a success and it is sustainable".

## 5.3.2.6 Final Thoughts

At NTT Data they believe that "this is the decade for leveraging gamification" and they do not believe that it has reached its peak yet as we are still learning a lot on how to use gamification appropriately and we are still discovering all that it can do for us. They believe that "we are finding new innovative ways of using game mechanics to really enhance work flows and various business processes". According to them what may change is the word that is used to describe it but the concept will remain. "So we may change the word we use but when you strip it back what gamification is really is behaviour modification. I think you will always need to know how to modify or change behaviour of the users to get a certain outcome. Whatever you call it the concept will be there for a very long time".

However the Step 1 criterion to make it successful in an organisation is that "it takes a bit of research and thought before diving in to the use of it. You need to understand the psychology behind it and use it appropriately".

#### 5.3.3 Case 3 Report: Persistent Systems Ltd.

Interviewee: Sameer Bendre, Chief People Officer Number of Employees: 7,000 Global Revenues: Unknown

#### 5.3.3.1 Overview

For Persistent the whole idea for gamification came about when they began to notice the following trends:

- The movement from oral communication to communication on the net. They noticed that there is not much paper communication going on anymore amongst people
- Secondly, it how the human mind works. The human mind does not understand word, it understands images. They were intrigued by how movies stay in your mind because of the combination of the image and a story.

- The move from the traditional value people placed on monetary rewards as a show of appreciation and way to engage people to the popularity of games such as Farmville. They wanted to understand why were people getting so much satisfaction and enjoyment from asking a friend for stuff to build their own virtual farms and why this form of performance feedback was so powerful for people.
- IT as a function is moving to the next level through apps, social collaboration, analytics as an IT company they needed to figure out how to ensure their people reacted appropriately to stay ahead of the curve
- This is the "Like Me" Generation where social networks and have developed in people the need to be constantly applauded and appreciated

#### 5.3.3.2 Social and Collaborative Organisational Culture

Persistent believe that the access to social networks through gamification platforms can lead to a tremendous boost in motivation levels and team work and efficiencies. They have evidenced within their organisation that with the younger generation they find that individually when you talk to someone one on one they are completely different to the person that goes on line to talk to people and interact. He believes that these are people who likes feedback, and like to know how they are doing and it you can provide this to them in a way that is very easy to digest and in a way that is naturally easier for them then it will have an effect on how people interact and knowledge share and collaborate in an organisation. Furthermore, gamification has had the ability to promote competition so that all 7000 people are aware of what everyone is doing, everyone is involved in it. through this they are creating a social cohesiveness that overall is getting people more engaged in the organisation and getting people to feel more as a team and creating healthy competition between people.

#### 5.3.3.3 Intrinsic Motivation

Within this system there are rewards that can be earned for vouchers for shopping malls etc. However they have a good mix between activities that have cash and noncash benefits. Sameer stated that "it's amazing how people really value a gracious thank you from their boss or their bosses' boss or some senior person in the organisation". What was demonstrated is how people really like is the concept of getting recognised and being noticed. The gamification platform helps people to get notice and the desire to do things for other people is driven by this quest to get noticed. "You will get noticed by people giving you rewards and gifts like someone working in the finance function can give a gift to someone in a completely different department because what he did helped the finance guy do his job better". This is leading to an overall better engaged workforce for the organisation.

#### 5.3.3.4 Continuous Feedback

One of the key findings within this interview was the impact gamification had in relation to continuous feedback. Sameer believes that monetary rewards are hierarchy driven and therefore they do not flow as freely as they should and are also only one way. With their gamification platform anyone can give feedback to anyone including their boss; there is a 2 way flow. Feedback is continuous and you can give anyone brownie points at any time. What this is doing for this organisation is "creating better people in the organisation to help each other and that is what is really engaging about it for people".

#### 5.3.3.5 Other Noteworthy Findings

#### 5.3.3.5.1 Attracting and Retention of Next Millennial Generation

There is evidence at Persistent to state that they believe that gamification has contributed to engaging millennial employees. They believe that for most young people today peer recognition and a sense of achievement and purpose are important to them in their daily working lives. At Persistent the average employee is 26 years old with the majority being fresh college graduates. For them, Sameer commented that "our gamification initiatives have supported us in getting sustained engagement levels from them over the past 3 years".

## 5.3.3.5.2 Tangible Evidence of Direct Impact on the Bottom Line and Competitive Advantage

Persistent were able to provide the following information during the course of the interview on return on investment and the effect the introduction of gamification has had on their business:

- Attrition has dropped by more than 350 basis points
- Customer ratings have consistently gone up over the past four feedback cycles
- "Employee Satisfaction Scores are higher than ever before"

#### 5.3.3.5.3 Gamification Link to Business and HR Strategy

When introducing the concept of gamification and its platforms to the business Sameer has learnt you cannot introduce a one size fits all platform to everyone all at once. His evidence suggests that introducing concepts that have meaning and value to smaller groups and functions is the way to go. "We went function by function. We went to the finance function; the legal function etc. and we then went to bigger groups. Sometimes we went by location and then we went to the sales guys etc". The importance of doing this he said is to give each group enough time to understand what they were trying to do and how it benefited their own business objectives. That way they found it is easier to get people to participate and enjoy its introduction and therefore be more successful overall.

He stated that people need to understand the "What's in it for me bit, this is a big part in its success".

## 5.3.3.6 Final Thoughts

Sameer believes that a unique part of human psychology is our need to want more and more whether that is feedback, recognition, virtual rewards, beating the competition. Gamification is a way to allow that to happen but also to capitalise on it to support business growth. He stated that "I think that a really important part of human psychology is that humans are the only ones that don't hunt when they are hungry. Every other animal will only go and hunt when it is hungry, we will go and hunt even when we don't need things. That is human psychology and if you can do this and let the other guy win with you than why not. It is not always that when I win you have to loose. The both of us can win at the same time."

## 5.3.4 Case 4 Report: Redknee Technologies

Interviewee: Abhijit Atre, Finance & Shared Services Manager

Number of Employees: 200

**Revenues:** 2012 performance resulted in a turnaround to a net income of \$5.3 million from a net loss of \$1.6 million in 2011.

#### 5.3.4.1 Overview

Redknee first came across the idea of gamification to support them to increase the usage of their e-learning training system. As a small organisation, with a limited budget for training and development they needed to engage and enthuse employees to use their on-line repository of training programmes. This is something that has traditionally hard to achieve since the introduction of the concept. Gamification became attractive to them due to the simplicity of its design and its use of social media type platforms like Facebook but it ensured that content was not compromised. One of Abhijit's objectives as GM is to continuously motivate and excite his employees to ensure he gets the very best out of them to support the growth of the business.

#### 5.3.4.2 Achievement and Progression

One of the key areas within the gamification system is the "innovation board". The mechanics of gamification has enabled this to become a real driver for people to be seen in the business and to be exposed. People post innovative ideas to the board, the more they do it the more points they get and the more they get recognised. It is a free area where everyone can see it, right up to the CEO so that increases the chances of you moving up the ladder. If some of the ideas get accepted or the company files a patent then it moves to the next level. So instead of moving through the traditional channels you get straight to the point. Abhijit believes that "people want to feel and know they are making a contribution to the business" and gamification is allowing them to do that whilst also benefiting as a business from the ideas generated which they feel is contributing to the companies accelerated marketplace growth.

#### 5.3.4.3 Social and Collaborative Organisational Culture

Abhijit feels that the system also contributes majorly to employee engagement through this addition of chat, discussion and business forums to the gamification system. This helps people get to know one another, share information and collaborate and gather people together in one place that helps them to identify with the company with quick access to information and problem solving. What the difference is with the gamification platform is that people are encouraged to participate as they will earn points and credits for their interactions.

#### 5.3.4.4 Intrinsic Motivation

Abhijit believes one of the main benefits of gamification is its ability to tap in to employees' intrinsic motivations. They evidenced this through what they term "the attraction quotation". They found that people placed huge emphasis on being "liked" and receiving feedback from colleagues on the system. This ensured that there was an incentive for people to go on to the portal and maintain the enthusiasm for incoming traffic to ensure sustainable engagement on learning.

#### 5.3.4.5 Other Noteworthy Findings

#### 5.3.4.5.1 Attracting and Retention of Next Millennial Generation

Abhijit believes that the age of your workforce influences engagement in the use of gamification platforms in an organisation. Abhijit believes that "the new generation is the social media generation". He sees a growing trend that people don't want ready-made content anymore and definitely not content that involves a lot of in-depth reading. In order to engage this level of audience, the approach that gamification takes is highly relevant.

# 5.3.4.5.2 Tangible Evidence of Direct Impact on the Bottom Line and Competitive Advantage

Within the interview Abhijit demonstrated that within his industry and the due to the size of his business he simply does not have the budget for training. Through the introduction of gamification "this has allowed us to provide this very close to free of cost to the business". He told me that he is able to offer management training and leadership training on-line and get people engaged in completing it. He has captured the needs of training on the portal and by adding gamification people have suddenly

found it as a very cool factor. He is a firm believer that the more and more people get educated the more and more value he and the business is seeing from that. "The company who said no to training is suddenly seeing the feel good effects of giving training to employees. So in that sense it is definitely an advantage for the employees and the business as a whole". He sees that without training and development his business cannot edge ahead of competitors and keep up to date with customer requirements. He believes that it is "a big advantage".

#### 5.3.4.5.3 Gamification Link to Business and HR Strategy

When quoted the phrase that "gamification is not the sprinkles on top of the icecream" that appeared in the literature review, Abhijit's response was "this is bang on". Abhijit's experience has taught him that you need to identify the business strategy and what you are trying to do and have gamification integrated in to a business need. He believes that gamification is not a "stand-alone product" and that before introducing gamification there is a whole thought process that you must carry out in relation to why you want to do it.

#### 5.3.4.6 Final Thoughts

Abhijit admitted that originally he was "sceptical" about gamification when he was first introduced to it. He felt that games are more associated with children and fun and not serious work. However, he feels that the industry is maturing and people outside the industry and in the world are also maturing. He now feels that "if games can become a source of income then the resistance will decrease". Like them, it will come across initial hesitation but believes that it won't take a lot of time for people to get over it. But it is critical that people are supported to understand it in order for it to become more easily acceptable. Abhijit stated "as soon as you start linking it to increased productivity or impact on the bottom line then you will no longer get the raised eyebrows".

#### 5.3.5 Case 5 Report: Oracle

Interviewee: Erika Webb, Senior Manager, Applications User Experience Number of Employees: 10,000 approximately Revenues: €13 billion

#### 5.3.5.1 Overview

Oracle as an organisation currently has approximately 60 individuals globally working on separate projects looking at gamification and how it can be used within their area of the business. This spans all sorts of areas from internal application where they just want to figure out how to get new sales consultants trained up and on boarded to external applications that they want to make available to customers. Certain parts of the organisation are more forward thinking and are therefore more advanced than others. Oracle's main reason for investing in gamification however comes from there analysis of future and current trends. It was evidenced in this interview that Oracle is hedging their bets on the trend "when we begin to see other organisations starting to do things like gamification that definitely creates some momentum and we don't want to be caught with our pants down on this". The pioneers at Oracle are also experiencing increased interest in the concept from the very senior level of management. Erika comments "as this becomes more public and as you see other big companies announcing gamification initiatives it definitely changes how things are done and suddenly people are interested in what we are doing". The attitude towards gamification is slowly moving towards been seen more as a necessity to doing business than a strategy for competitive advantage.

### 5.3.5.2 Intrinsic Motivation

It was clear in this interview that the ability of gamification in terms of its impact on engagement is a "win one concept" on how it has the ability get people to "do things that they don't really want to do but management want them to do". The examples given here were in relation to the impact it has on the annual appraisal process and onboarding of new employees, if they are gamified.

Within this interview Erika gave solid evidence of gamification's ability to get people to perform training and increase their knowledge of the organisations products without impacting on the companies' time and even getting employees to do it on their own time. It can also make the training an enjoyable and fun experience for people as that are participating in a game and don't realise they are training. Also, the sense of competition created by putting teams together to perform the learning increases engagement further but also adds to collaboration amongst colleagues who may not otherwise have spoken. The full examples can be seen in the interview transcript in Appendix 8.

#### 5.3.5.3 Continuous Feedback

It was evidenced in this interview the positive impact gamification has on continuous feedback and how this has become an essential element that needs to be satisfied within the employment contract to ensure employee engagement.

Erika commented that in today's large global, face-less organisations "there is a lot of sense that people have less transparency on what they need to be doing and less feedback on whether they are doing things correctly". However Erika feels that the younger generation needs this as they are brought up with this in school. In high school in America all grades are posted on line. The next generation are looking at it all the time and they are looking for that feedback constantly. They need to know "where am I, how am I doing, where am I in the system?" Erika stated "we didn't do that when I was in school but today they are a more constant feedback consumer". Erika believes that the younger generation have a sense that they ought to know immediately how they did on something and this is something that companies have to adjust to and that gamification is a very strong means to providing this.

Erika continued to express the importance of feedback in employee engagement in stating that "people have a feeling of being disengaged if they know they are getting nowhere". It is hard for people to come to work every day if they have a sense of "am I getting anywhere?" What gamification does is give people progress indicators on where they are in the flow of things. It tells them what good looks like, gives them a set of things they need to do to get there, tells them where they are and how much they have left in their plan to get there. As Erika states "it is just good user

experience". She used the analogy of how frustrated we all get when you click on a button and nothing happens and you don't know what to do. "Gamification is that sense of feedback, progression; a sense that you are mastering things that are a kin to good user experiences why can't this e applied to a user experience of the workplace?"

#### 5.3.5.4 Other Noteworthy Findings

#### 5.3.5.4.1 Gamification Link to Business and HR Strategy

Erika believes that one of the trickiest parts of gamification is getting people to "understand when gamification is going to help you and when it is not". Overall the themes expressed here centred on the idea that if an interface or a process is badly designed no amount of gamification is going to help. Erika used the term "chocolate covered broccoli". If a system, a process, a business requirement is ugly and badly designed or employees cannot understand the rationale behind it, gamification is not the solution. However it became clear that Erika's experience is that if you have something that is reasonably well designed but you just can't get people to use it then gamification might be the solution.

#### 5.3.5.5 Final Thoughts

A key finding from this interview centred on how bad gamification can actually have the opposite impact on employees by making them disengaged in the organisation. Erika offered examples of these. However for these findings it is thought that the pitfalls to avoid will be of more relevance to the readers of this thesis. Number one is that you cannot proceed without having a business objective and the second pitfall to avoid is not understanding the motivations of your end user. In order for gamification to truly impact on your employees engagement levels to support the business Erika suggests that you develop a "user persona to figure out what would this user care about?" and then adapt the gamification platform to that. Erika offers "different things are going to appeal to different groups and different users and if you haven't considered who you are talking about you can do it very wrong and really turn people off". The general message here was that at the end of the day if someone in finance for example sits quietly in a cube all day long and you start to leader board that, well that person is going to freak out and if anything become less motivated.

# 5.4 Cross Case Findings Summary

The aim of this section is to gather together the key findings in each of the five replication cases above to form a cross case findings summary. This will satisfy the first step, "Draw Cross Case Conclusions" of the "Analyse and Conclude" Stage to Yin's replication approach to multiple case studies. This information will then be used to complete stage step two and three of this stage, that of "Write Cross Case Conclusions" and "Modify Theory", which will be presented in Chapter Six.

# Cross Case Findings Summary:

# Gamification Strategy and Link to HR and Business Strategy

- This is an imperative concept before introducing any gamification platform
- A company must be able to quantify measurable business value to justify the expense to prove CA impact
- Need a clear purpose as to what the business goal or need is and clear understanding of why gamification will make a difference
- Users need to understand how it will impact them personally and the benefit to their business objectives.

# **Gamification & Achievement and Progression**

- Clear Goals and defined stages of play allow people to map their performance and calibrate against the organisations expectations
  - Transparent, public and real time information encourages personal desires to reach or better social norms
  - Creates a healthy sense of competition to increase performance that ripples across the entire organisation
  - Exposure as an expert across all levels of the organisation promotes pride and advocacy in job

# Gamification & a Social and Collaborative Organisational Culture

- Encourages information sharing and quicker flows of information throughout the organisation
- Visible Data sharing eliminates communication bottle necks and allows for business process improvement
- Decreases waste through eliminating replication
- Helps everyone feel part of a common cause
- Helps create an environment where people want to help one another

# **Gamification & Intrinsic Motivation**

- Encourages behaviours that gets employees to perform for personal satisfaction and not based on what management are telling them
- Internal perception and reputation amongst peers highly valued, gamification enables this
- Ability to connect with like-minded peers encourages skill development and drives further motivation to get involved in the organisation
- People are naturally motivated to stay on top when they reach that level
- Is successful in getting employees to do things they wouldn't normally want to do by making them fun or interesting or even by not realising they are doing them at all

# **Gamification and Continuous Feedback**

- This is the era of the "Now" and "Like me" generation
- Virtual feedback is easier for people to give because of ease of communication/emotional expression amongst virtual persona or personality
- Instant feedback and credit for little things the power of a "thank you"
- Public recognition increases internal perception and encourages desired behaviours within the organisation

- Two way vertical and horizontal flow of continuous feedback
- Gamification combats against the effects that the faceless organisations of today have in making people feel lost and unaware of the value of their contribution

# **Other Noteworthy Findings**

- Only by understanding the psychology behind it will you gain the acquired behaviour modification
- Mixed evidence to success being age/generational dependant
- Younger generation will expect organisations to adapt to their social media savvy ways and organisational communication and engagement methods will have to adapt to them.
- General acceptance that initial introduction will be easier in countries with a younger workforce
- 45 minutes more productivity per day x 1000 people
- Increased employee referrals of innovative business process or product improvements by 30%
- Customer Ratings have consistently gone up in the past four feedback cycles
- Bad gamification can have a disastrous impact on disengaging employees much worse than any level of engagement that you would have got if done correctly

 Table 5.2 : Cross Case Findings Summary

# **Chapter Six: Discussion and Conclusions**

## 6.1 Introduction

The aim of this section is to link the primary and secondary research to discuss an overall answer to the original research question i.e. Can the HR function use gamification as a Strategic Tool to gain Competitive Advantage for an organisation via increased employee engagement? The critical outcome of this chapter will also be to validate the Conceptual Model, constructed at the end of the literature review (Figure 2.1, Page 23), for how this can be done. The importance of this is to have a visual tool that can then be used as a guide for HR professionals currently considering the introduction of gamification within their HR strategy. This can be utilised when presenting a business case for investment in gamification technology.

This chapter will also conclude by outlining the limitations of the research undertaken and will make recommendations for future study in the area.

## 6.2 Conclusions of the Case Selection Process

The first interesting area for discussion relates to what was revealed as part of the case selection process itself. It can be stated, that following this piece of research, that at this stage of the life cycle of gamification it was very difficult to access real life cases for this particular research project. This shows that although there are many industry analysts and experts discussing the topic and its merits on a global scale there is a distinct absence of validated return on investment stories, real life case histories and academic or commercial research to provide evidence of actual usage, return on investment and impact on bottom line competitive advantage.

One of the original statements at the outset of this thesis identified that there is widespread data available on what gamification is and how it can be utilised; mainly by gamification platform providers. It was also identified that there was much widespread commentary by industry experts making predictions like Gartner (2012) stating that "gamification will be in 25% of redesigned business processes by 2015, will grow to a \$2.8 billion business by 2016 and 70% of the top global 2000 businesses will have at least one 'gamified' application by 2014. More recent research

entitled "Gamification Market: Worldwide Market Forecasts and Analysis 2013 -2018" released in June 2013 by global market research firm Markets & Markets (2013) has increased this prediction to value the gamification market to "\$5.5 billion by 2018". However it was stated that it was felt that one of the missing piece of the jigsaw for HR directors and business professionals was the tangible real world stories to evidence where these figures are coming from and what companies are seeing to be the overall value of investing in or adopting this strategy. An aim of this research was to see if this indeed was true and following a full research process this has been proven correct. There is indeed a lack of demonstrable evidence to back up the industry analysts and professionals claims. It must be noted however that throughout the course of this research considerable upgrades have been made by many platform providers on their commercial websites to evidence client case stories however there is still a considerable lack of impartial research on the impact to the bottom line. There is also, as proven through this research process, an immense difficulty in accessing actual end users. This would possibly reveal that the concept of gamification within HR is not as widespread, as yet, as is one would be led to believe. Also there is certainly, at this stage of its life cycle, a lack of all-important tangible scientifically validated reference points to draw upon to support a business case for its introduction to an organisations strategic growth tactics.

# 6.3 Conclusions of the Cross Case Research Process

This section looks purely at the conclusions of the findings from the primary research findings and elaborates on the data collated in Table 5.2 titled "Cross Case Findings Summary".

The first clear point that can be evidenced from the primary research case studies is that all five organisations are advocates for gamification forming part of their HR processes to engage individuals with the organisation and their roles within the organisations they work for. Fundamentally what these organisations are doing is keeping abreast of the latest social trends and technology innovations to help them to modify their employees behaviour in a way that benefits the business overall. They all come across as forward thinking and future focused organisations who demonstrate an acute awareness of the external environments impacting on their businesses and using the rapid changes in these environments to create opportunities to motivate their employees in unique ways. However, what is clearly evidenced is the need for any gamification strategy to have clear defined links to the business objectives that are trying to be achieved overall. Gamification will fail in its efforts to be a strategic tool to engage and motivate employees in the ultimate aim of competitive advantage if there is not a clear business strategy in place to begin with. An organisation must chose its strategy and then choose its technology. The gamification technology must then be linked to the business drivers and be relevant to employees day to day work. Equally when introducing the concept to the C-Suite or business decision maker this must be done so in a language that resonates with that individuals business goals and have interconnecting measurable objectives which it is consistently evaluated against.

It is clearly evidenced from the primary research that if strategically aligned and well designed, gamification has had a powerful impact on improving the intrinsic motivation of the employees at the companies studied. The interviewees in turn attributed this to direct bottom line impacts on their business that can be used as sources of competitive advantage. The important element in this however is how gamification has been the catalyst for this and how exactly it has been something different from anything done in the past. The use of gamification platforms has appeared to enhance the holy grail of the psychology of work, that of getting people to work smarter and be more productive for less monetary rewards. The introduction of gamification platforms appears to have been able to meet some of the most basic needs of these companies employees such as their desire for recognition and achievement amongst peers and superiors, being part of "something" and seeing where they are making a contribution to that, gaining continuous feedback to know how they are progressing in the grander scheme of things and having a clear path on how they can improve to achieve more. However the silver bullet theme that has reoccurred throughout the case studies is that gamification has enabled this thorough the most powerful form of motivation, that of self-motivation, across all levels and in all pockets of the organisation.

# 6.4 Modified Conceptual Model

This section will continue to examine the conclusions of the findings from the primary research and link them to the conclusions of the secondary research findings to form the validated model for how HR function can use Gamification as a Strategic Tool to gain Competitive Advantage for an organisation. The original conceptual model that formed the outcome of the literature review is shown in figure 6.1 below.

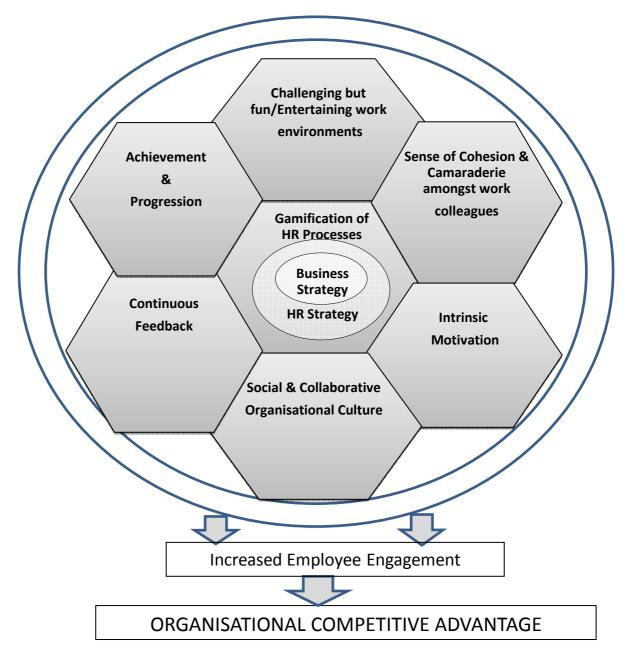


Figure 6.1: Conceptual Model of how HR function can use Gamification as a Strategic Tool to gain Competitive Advantage for an Organisation

It is clearly evidenced from the primary and secondary research that in order for any HR strategy to be effective within a business there must be a clear alignment between it and the key drivers of the business overall. The secondary research, of the literature review, advocated that as the people within an organisation are the most non-easily replicated source of differentiation for a business, if effectively deployed they offer a very powerful source of future competitive advantage for an organisation. However, as evidenced in the literature review and repeatedly backed up by the interviewees in the primary research, in order for any HR led people initiative to have a fundamental impact on the competitive advantage of the business it must be an integral part of business strategic planning and tightly tied to the business strategy. Likewise, as discussed in the cross case research process above, one clear outcome from the primary research case studies is the fundamental importance of the gamification technology linked in turn to the HR Strategy that is aligned to the business strategy. Each of the interviewees talked about the importance of pinpointing your business objectives and working out exactly what it is that you want to achieve and then introducing a gamification platform that you can wrap around that in order to achieve your goal. For these reasons it is felt that there is sufficient evidence from the primary research case studies to back up the secondary research claims to allow the core of the conceptual model to remain the same.

Before discussing the outer "petals" of the Conceptual Model in detail it can be concluded from the primary research that there is definitive evidence to back up the primary research claims of a link between employee engagement and organisational competitive advantage. The organisations studied could provide clear evidence that by engaging their employees in the organisation, getting them involved and helping them feel connected there was tangible evidence of a knock on effect on bottom line results. Examples given included process improvements, product innovation, higher productivity, increased knowledge sharing and better customer satisfaction results. This substantiates claims made within the literature review that having an engaged workforce drives the desired behaviours in an organisation to support it gain a competitive edge in an ever competitive business world were sources of unique advantage are proving harder and harder to uncover. Another clear conclusion from the primary research that provides evidence to back up claims made in the secondary research are around the changing drivers of employee engagement in today's work environments. Within the case study organisations there is clear evidence to suggest that employees are not as motivated by monetary elements alone. We may not have evidenced that we can go as far as the claim in the literature review that employees are now motivated by "the experience that going to work gives them", but there is a great amount of evidence to back up the claims of many of the other writers. The case study research positively confirms the changes in the critical elements that impact driving positive employee engagement in today's business world. Amongst them, the importance of employee recognition, employees need for feedback and positive reinforcement, the desire to build a positive team and spirit, the need for connectivity through technology.

Next to examine the outer "petals" of the Conceptual Model to verify if the information gathered from the primary research case studies concurs with what was proposed following the literature review. These outer "petals" represent, according to the literature available, the impact that deploying gamification technology can have on an organisation and how in turn it contributes to meeting the core needs of today's employees to have a direct impact on employee engagement. However, following the case study research some amendments have been made to these outer "petals".

Two areas that remain unchanged is the clear evidence from the case studies on the impact of gamification in supporting employees' needs for "Achievement & Progression" and encouraging "Social & Collaborative Organisational Cultures". There is strong evidence to suggest that these two elements are powerful requirements to the employee engagement mix that gamification platforms enhance. As a result these two "petals" have remained unchanged.

There is also strong evidence to suggest the importance of "Continuous Feedback" as a driver of engagement for today's workforce. It was also evidenced that this need to know how one is performing will only increase in the future generations that are entering the workforce. This continuous feedback is however directly linked to employees need for performance assessment and to gauge where they are in relation to peers and give them a clear alignment to the organisations expectations. This petal has therefore been re labelled "Continuous Feedback & Performance Assessment". This is now the third employee engagement driver that is evidenced to be fulfilled via the gamification platforms deployed in the organisations interviewed.

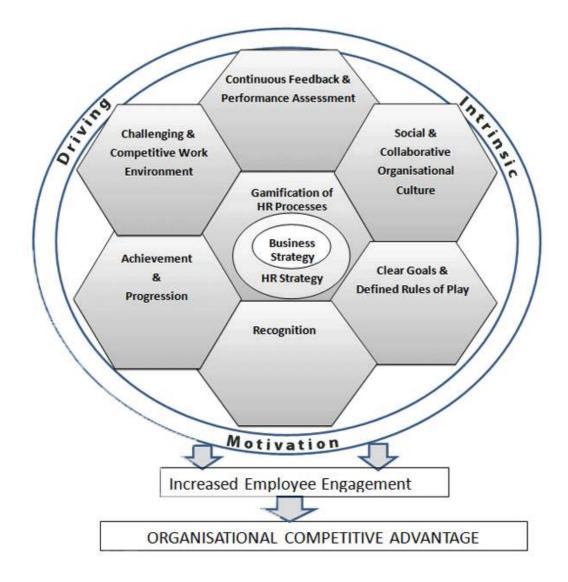
The "petal" entitled "Challenging but fun/entertaining work environments" has been relabelled to "Challenging & Competitive Work Environments". This is done so on the evidence that the use of the word fun or entertainment will devalue the business case for gamification and the complexity and power of the concept. However, there is also a large amount of evidence to suggest that the concept of healthy competition within an organisation is motivating for employees and gamification facilitates this in a social and entertaining manner which proves to be much more productive and impactful for the organisational then simply having a working environment that is "fun" to work in.

Two new "petals" are that of "Recognition" and "Clear Goals & Defined Rules of Play". These emerge as important elements purely from the themes collected from the primary research alone. There is reoccurring evidence to suggest the importance of the role of these two elements in driving intrinsic motivation of employees and clear evidence to suggest how the introduction of gamification platforms can facilitate an organisation to address these employee needs. There is clear reoccurring evidence from the case studies of how important it is for employees to be "seen" and recognised for the contribution they make to their organisations, whether this is from peers or from superiors. What is also evident is that the size of this recognition does not have to be large, in fact in some cases, the simpler the bigger the impact. Through the introduction of gamification platforms in these organisations even the hope of recognition from peers or colleagues has motivated employees and generated desired behaviours.

Equally an organisations ability to understand the power that helping employees to understand "what good looks like" or what the organisations expectations are of them in a non-hierarchical manner, by clearly setting out goals & having defined rules, plays an important role in giving an employee a sense of purpose in the organisation. There was very strong evidence to suggest that today's employees can become very disengaged in today's global and faceless organisations if they don't have a clear purpose or understanding of what the organisation wants from them. Gamification platforms appear to satisfy an engagement driver by helping employees to know how they are contributing to the overall organisation and also meet the need employees have for guidance on how to keep up with play to ensure they are aligned with future organisational goals and changes.

A critical change to the model has been the step to move the positioning of the term "Driving Intrinsic Motivation". Following the primary research it is felt that it is now more appropriate that this is represented as being at the heart of what is being created to fuel the knock on outcome, which is increased Employee Engagement. In summary what this is representing is that through having a business focused HR gamification strategy there is considerable evidence to suggest that gamification platforms meet the changing drivers of engagement in today's workplace. By meeting these needs of employees you are fuelling a powerful source energy within your business, that of driving the intrinsic motivation of your employees. This results in a knock on outcome of increasing real and sustainable employee engagement within your business, which in turn has a direct impact on your organisations competitive advantage.

All of this is represented in the validated theoretical model to summarise the impact that gamification has on influencing employee engagement and how this links with HR strategy and competitive advantage. The validated model is outlined in Figure 6.2 overleaf. The purpose of this model is to have a visual tool that can then be used as a guide for HR professionals currently considering the introduction of gamification within their HR strategy. This can be utilised when presenting a business case for investment in gamification technology to support organisations efforts of achieving organisational competitive advantage in the fast moving, technology driven age of today.



# Figure 6.2: Validated Model of how the HR function can use Gamification as a Strategic Tool to Gain Competitive Advantage for an Organisation

# 6.5 Overall Evaluation of Thesis

Overall it can be concluded that the concept of gamification is actually more prevalent than we think; the analogy of the corporate ladder is often used as a powerful gamification model that has motivated employees for decades. The challenge is to get to the top of the ladder. Progress is monitored through performance management and status is provided through titles like consultant, manager, senior manager, director. As you "level-up", you unlock better offices, challenges, responsibilities and perks and financial rewards is linked to your salary band level. However overall the evidence in this research suggests that the difference gamification platforms are making is the ability to connect with everyone in the organisation in a language and through a medium that people are willing to engage in. This research has shown that gamification platforms may prove to be a powerful necessity and not just a luxury in the organisation of the future. Through this research there is evidence to prove the self-motivating behaviour changes that gamification can have to make even the most mundane work tasks competitive and fun. Employees appear to become motivated because they are doing things they want to do and in a manner they want to do them in and in turn the organisation benefits on the bottom line.

What this piece of research has achieved is to showcase how some real life organisations have done exactly this. It was recognised at the beginning of this thesis process that HR and business decisions makers did not have access to impartial case study data in this field. This piece of research is a stepping stone to making this information available. However, self-analysis and critical evaluation would suggest that the cases covered within this thesis are only the tip of the level of research that is still required to truly validate the concept of gamification and to enable a categorical conclusion that gamification is a long term strategy to deploy and invest in as part of a corporate human resources strategy. For this level of research the objectives of this research have been achieved, those of;

- 1. To examine published literature on the evolution of the gamification as a concept and tool to drive increased employee engagement within an organisation and in turn have a measurable impact on the competitive advantage of an organisation.
- 2. Through this research to construct a conceptual model to create a visual representation of the summary of available literature to examine how the HR function can use Gamification as a Strategic Tool to gain Competitive Advantage for an organisation
- Collect empirical data from early adopters on Gamification within HR processes to test the conceptual model
- Review the conceptual model based on the findings of the empirical data to confirm a robust model to explain how the HR function can use gamification as a Strategic Tool to gain Competitive Advantage for an organisation

However, the difficulties in accessing a wider range of organisations to participate in this research has limited the methodological approach of this research and has left a lot of scope for further research in this area. This research has proven that the concept of gamification is certainly not one to be ignored or mocked. This is proven also through the number of companies and HR Directors that have requested a copy of this research when it is complete. The practical implications of this research have shown that well designed gamification has had a powerful impact on improving the intrinsic motivation of the employees within the case study organisations. But fundamentally the use of game psychology and game mechanics is not about the manipulation of individuals but that people can see the relevance, importance and reward of the gamified initiative in the greater scheme of their work-life.

#### 6.6 Recommendations

As indicated above it is recognised that the cases covered within this thesis are only the tip of the level of research that is still required to truly validate the concept of gamification and to enable a categorical conclusion that gamification is a long term strategy to deploy and invest in as part of a corporate human resources strategy. For this reason I make the following recommendations for consideration and for further research:

• It would be my recommendation that in order for this phenomenon to grow to the heights outlined and to support its professional image as a bon fide serious and strategic business tool it would be highly beneficial for there to be some form of regulation or professional body to oversee the industry. At present is appears to be self-regulated by commercial operations but until it starts presenting results in a language that business people understand and resonate with, it will struggle. Two such organisations are in existence, The Gamification Research Network (GRN) and The Serious Games Institute. A further recommendation would be for research to be conducted in conjunction with these organisations to further examine the links between industry expert analysis and real world user analysis.

- All of the cases in this research were organisations within the IT, and technology sectors. A recommendation would be for similar research to be conducted with organisations outside the technology sector.
- A limitation of the methodology of this research was that interviews were only carried out with the stakeholders responsible for the introduction of gamification platforms within their organisations. A recommendation would be to build upon the research carried out in this thesis to include some qualitative or quantitative research with the end users of the gamificaiton platforms i.e. the employees in each of the organisations. This would provide a thorough analysis of the viewpoints of the final end users to gain an insight into their experience and viewpoints.

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# Appendix A – Gamification Platform Vendor List as per Gamification Corp Website

Vendor Company Name	Area of Gamification Expertise	Contact made Yes/No or N/A (as not involved in employee engagement gamification platforms)
Dopamine	Customer and Employee Engagement	Yes
42 Terabytes	Customer Engagement and Rewards	N/A
500 Friends	Customer Loyalty	N/A
Actiplay	Online Marketing Games	N/A
Badgeville	Customer Loyalty and Employee Engagement	Yes
Bankerslab	Employee Training and Education	No
Bennu	Eco Responsible Marketing	N/A
BigDoor	Customer Engagement	N/A
Bizpart Engage	Customer Engagement and Employee Education	Yes
Bunchball	Customer loyalty and Employee Development	Yes
Busification	Employee Engagement	No
Clic&Gain	Marketing	N/A
CrowdTwist	Customer relationship and Loyalty	N/A
Customer Advacocy	Customer Rewards	N/A
Designing Digitally	E Learning	N/A
Echo.it	Employee Development	No
Emee	Employee Development and Customer Loyalty	Yes
ExpertOffice	Knowledge Management and Employee Engagement	No
Fastasy Sales Team	Employee Engagement for Sales Professional	No
Game on Learning	Employee development	Yes
Gameffective	Sales and Customer Service	N/A
Gaminside	Sales and Customer Rewards	N/A
Gigya	Consumer Management	N/A
Growth Engineering	Professional Development for Employees	N/A
H Engage	Employee Engagement	No
Healthper	Employee Health and wellbeing	N/A
Hoopla Software	Employee Engagement and Sales Performance	No
Hopskoch	Customer Marketing	N/A
Iactionable	Employee and Customer Engagement	N/A N/A
Icon Platforms	Customer Loyalty	N/A
Kazooky Loyalty	Customer Loyalty and Rewards	N/A
Labov	Marketing Communication	N/A
Leaderboarded	Employee Engagement	Yes
Level Eleven	Sales Staff Motivation	Yes
Loyalty Match	Customer Loyalty	N/A
Mindspace	Digital Marketing	N/A
Mind Tickle	Employee and Customer Training	Yes

Vendor Company Name	Area of Gamification Expertise	Contact made Yes/No or N/A (as not involved in employee engagement gamification platforms)
Mlevel	Employee Development	No
Mobitto	Customer Loyalty	N/A
Morsekode	Customer Connection	N/A
Nextbee	Customer Engagement	N/A
Object Frontier	Customer and Employee Engagement	No
Optic Bridge	Customer and Employee Engagement	No
Pakra Games	Sales and Customer Service	N/A
Playfull Shark	Customer and Employee Engagement	No
PlayGen	Customer Engagement and Loyalty and Employee Education	N/A
Pomegranate	Educational Apps	N/A
Pug Pharm	Customer Engagement	N/A
Punchcard	Customer Loyalty	N/A
Punch Tab	Customer Loyalty	N/A
Punto Extra	Employee and Customer Engagement	No
Ready Set Go Social	Customer Engagement	N/A
Rocketfuel Games	Marketing and Human Resources	N/A
Social Business Rocket	Customer Engagement	N/A
Sointeractive	Interactive Sales and Marketing	N/A
Spigit	Management Motivation	N/A
Tembo Social	Customer and Employee Engagement	Yes
Venture Spirit	Employee Engagement	Yes
We Play	Brand and Customer Loyalty	N/A
Wonnova	Online Marketing	N/A

# Appendix B – Examples of Organisations Currently using Gamification Platforms with HR Processes and Employee

## Engagement

Company Name	HR Use	Gamification Platform Name
Department of	Recruitment	Unknown
Defence, UK		
Salesforce.com	Sales and Performance Management	Work.com
American Army	Recruitment and Training	Americas Army
Siemens	Internal Development	Plantville
IBM	Employee development	Innov8
SAP	Community network	Vampire Hunt
Microsoft	Problem Solving And Information	
	Gathering	
Marriott Hotels	Recruitment	My Marriott
L'Oreal	Recruitment	L'Oreal Reveal
Deloitte	Leadership	Leadership Academy
EMC	-	RAMP Programme
Pfizer	Employee Engagement/Wellbeing	KeasSystem
Dell		
IBM	Connection to Internal Processes and	Innovate8
	People	
Facebook	Employee Feedback	Loops
Coca Cola	Development Programmes	Peak Preformance Programe
Cheescake Factory	Employee training and interaction	Video Cafe/Glamburger
Deloitte	Leadership and Training Programmes-	Green Dot Mission
	knowledge management - Recruitment	
Delta Airlines	Employee Education and	Ready Set Jet
	Well being	
CISCO	Sales Force Engagement	Cisco made simple
Danone	Recruitment	Trust
Cold Stone	Training	Stone City
Creamery		
Achievers	Performance Management	
TopCoder	Sourcing People	an open competition based
		development
Objective	Motivation and Learning	Muse
Logistics		
Risk	Employee Engagement	Trading Card Game
Management		
Services		

Source: Various literature reviews and on-line blogs and discussion forums

#### Appendix C – Copy of Interview Prompt Questions

Is HR seen as a strategic partner in your business?

As the business environment becomes more competitive and companies look for new ways to gain comp advantage do you think the HR Function can contribute to this? Are your people seen as a differentiator in your business? How are they a source of competitive advantage? On a scale of 1-10 (10 being highest) how key are people as a source of competitive advantage in your business? Why are they a critical success factor? Has this always been the way at X Company? Do you suffer from skills shortages/retention issues?

In particular the area of employee engagement has emerged as an area that can contribute significantly as a business driver to business success. Employee engagement contributes to internal success factors such as increased employee loyalty, retention and productivity issues. It also has measurable results on its contribution to external success factors such as increased customer engagement and retention, overall company reputation and stakeholder value. There is tangible evidence to back this up. What are your thoughts on this?

Do you have any evidence of the effect that disengaged employees have on your bottom line or business performance?

What are the key drivers of engagement for you in your business?
E.g. Achievement and Progression in career, intrinsic motivation
How have the drivers of engagement changed for you over the past few years?
E.g. sense of fun, camaraderie, social and collaborative organisation
When did you first come across the concept of gamification?
What kind of business case did you need for the investment?
How did you get buy-in from the business?
Did you come across much resistance because of the word "gamification" and what the term game may mean in a work environment?
What areas of hr/the business do you use it in?

What is different about using gamification platforms from more traditional methods of engaging employees e.g. through pay increases? What makes this such a different motivator of people? What is so different about gamification as a technique to engage employees?

Critics are saying that "gamification" is just a new word to describe the age old discussion on the psychology of motivates people at work. What is the different benefit that gamification provides to the business?

Do you think that it gives you the opportunity to find a competitive edge in recruiting, retention and talent development?

How do you know that your employees want and enjoy using gamification platforms? What is it about virtual gifts and rewards that employees enjoy? Do you think it has long term application/viability? (EVOLVE and ADAPT to PLAYER?) Do you use it in any other elements of HR?

### Appendix D: Transcript of Case Study Interview 1

Interviewee: Tarun Sharma VP R&D and CEO of BMC Software India Company: BMC Software Interview Date: 9<sup>th</sup> July 2013 Length of Interview: 37 minutes 12 seconds Number of Employees: Globally 6,500 Global Revenues: Fiscal 2012 - \$2.2 billion

**Fiona:** Thank you for your time. I would like to position this call as you as an end user of gamification within your organisation and to gather an insight in to the benefits you are receiving. How did you first start using in gamification?

**Tarun:** This is now a topic that we have been thinking about for 2 years and have started taking steps in to how it has worked and how it has not.

There are primarily 2 areas where we looked at using gamification

- 1. To influence the behaviour of our own employees and how to get those to behave in a way that is not based on what their managers are telling them.
- 2. How we influence our customers and their knowledge of our organisation.

In the first area the questions is: What can we do to get our employees and our managers to behave in a certain way based on what the organisation requires but it is not management driven.

There was a also a different driver that is based on gamification theory that gets people to behave in a different way where there are rewards associated with it but they are not monetary.

We have done a lot of analysis and figured out that monetary rewards are good but they do not really cause employees to behave in a certain way and certainly does not get the desired levels of productivity or engagement. They are a good thing but they are not designed to get people truly engaged in the organisation.

But on the other hand if you can somehow link what they see as a reward in some sort of a competitive stack with their peer's people tend to behave different.

There is a whole lot of research going on at the moment in relation to a concept called "the quantified self". You should do some research in to this. I don't know about you but a lot of people wear a band around their arm that gathers information linked to an Apple App that gives them a whole lot of information in to how many steps they take, how many hours they sleep etc. This information is then mapped against a whole bunch of other people and you can help yourself to lead a healthier lifestyle by comparing what you need to do against what you are supposed to do. When you start to look at your app you start to look at what you can do to improve your stats and lead a better life. The whole concept can be applied to people at work.

To give you an example of this, one of the largest products that BMC has is Remedy. This system is used all around the world to track IT helpdesk support calls. When you put in a helpdesk support call with your IT department or provider you receive a ticket and when your call is answered your ticket is closed. More than likely anywhere that system is used around the world it will be Remedy that is doing it. What we have done through gamification is to create leader boards for people who are answering these calls. At the moment we would expect an average service desk person to close at least 10 tickets per day.

What we have done is gather the data on how many people are closing a day, who has the most, what does the leader board look like and then you get some kind of competition going. You have got this dashboard of information going with leader board information.

Think yourself if you play any games at home, I know personally that what drives me to get my score higher is that when I see my wife or daughter has beaten my score and I try harder then to beat their score. You will find the same in work, you will see that the top guy has closed 20 tickets today and I have only scored 10 and you will start to ask yourself, what can I do to do more than 10 and this ripples through the whole organisation.

Then you start to introduce more things so people are not only getting points for closing tickets. For example if you also write an article about what the problem was and how you solved it then we'll give you extra credits. If you close the ticket but write an article and link it back to the ticket now you are getting extra points and the leader board is not just about singular activity, it is helping the organisation as a whole to uplift itself because if I have a lot of articles and if the same issue occurs again then we have the information to solve it faster.

Then if we see that this problem keeps occurring we can look at a way of automating the problem. And if we automate it the organisation gets huge benefit than just solving it manually.

So what you are doing is creating behaviours that help the whole organisation and not just you or your department.

So another area of the business that we use gamification is amongst our 1000 programmers. Going back to the concept of having the band on your arm, if I can get a programmer to know how much time he is spending on meetings, how much he is spending on actual programming and can get data on what an average programmer looks like and show it to them then they can see the difference of how you are performing compared to the average programmer. He can do this without a manager telling him what he is doing or needs to do to improve. You don't need to come and explain to him why he is falling behind on his projects or where he needs to be reviewing where he is spending his time because he can see this himself.

As a business we get a lot of dashboards on how each group in the business is doing. We can see leader boards for Group A being the most productive but they have the least number of hours or group B works a lot of hours but doesn't have the productivity, we can see that this group will have a lot of burnout and waste.

Fiona: Do you publicise all of this information to your programmers?

**Tarun:** Yes, they have it on a daily basis in real time. The programmer can see exactly where he is spending his time, his throughput, what did he work on; his expected v's his actuals as so on. It gives the programmer tools so they can manage themselves well and their manager doesn't have to manage them.

We have also introduced a platform called Ninja Club to help us with a very specific issue we had. Basically, every single programmer wanted to become a manager a few years back. They felt that the only way for them to grow was to become a manager at some point. We wanted to get them to start thinking different. We started this concept of a ninja club and started campaigns around how they are really like martial artists or doctors. A good doctor does not associate his success with him being the CEO of the hospital. A good doctor is a good doctor because he can do complicated surgeries, he is well read and well written, he has patients that come from far and wide to get treated by this person, and he is sought out by his peers for advice. It has nothing to do with management.

It is basically a game against you. So we have been spending a lot of time getting people to take great pride in being programmers or being technical.

We also had an inherent belief that a lot of engineers are not very socially developed. So they may be very happy sitting in a corner cubicle programming but if you ask him to go and interface with 10 people he might find it a bit challenging. But the same programmer has a different persona in the virtual world. So he may be an introvert but if you are friends with this person on Facebook you see a completely different personality. The guy is actively chatting and is putting up pictures, he is a cool guy. We believe some people express themselves differently in the virtual world then they do in the real world.

So we use a virtual platform like eMee where they can express themselves virtually and we can identify our top talent via the persona's they portray on the gamification platform. In that platform we can put in a lot of things as gifts to drive the behaviour we want. For example if you have a programmer that went and did a speech externally he gets 500 points or if he does a speech internally he gets 200 points. All of these points can help him buy virtual things on the site. It has no monetary value but when someone else goes to this guy's site and looks at what he has then there is a perception that this guy must be very smart. There is no money involved but how you live and how many virtual rewards you have is a giveaway of how smart, active and intelligent you are. So we can drive a lot of behaviours using this platform.

**Fiona:** Do you think that one of the reasons that it has worked in your business is because you are dealing with programmers and people who are used to technology?

**Tarun:** Some of that is true. One of the things is that in general the people working at BMC are generally young. They are 27/28. They are generally used to social media and have Google hang out accounts etc. I think if I had to implement it in say our mainframe division where the average age is 60, I would struggle with this concept.

But I also believe that the people in general who are filling jobs in for example call centres in India are very young people. The demographics of the workforce in India are that we probably have one of the youngest workforces of all countries. So I would say that in India gamification is here to stay because the next generation of workforce is going to be very young, very technology savvy and they are very comfortable with social media and social media type apps.

I will tell you something else very interesting that we have done. We have built an app to get an idea of the engagement in the organisation. Most surveys that companies have, take about 20 minutes to complete and the participation level is very rarely above 20%. With that generally those that respond are either the people who are extremely happy or those that are extremely negative. So you are not getting a true pulse. You get extreme views.

We have created an app called "My Happiness". It takes 5 seconds to fill. The question it asks is "how are you feeling right now?" There are 4 options to answer. The first one is a slider that goes from very sad to ecstatic and you use the slider.

Then we ask "are you working on something meaningful right now? " Meaning is it something that is important for the company and something that is meaningful for you.

Then we ask "do you feel recognised by BMC software". This is another way of asking and finding out if people feel they think the company is investing in them etc.

Then we ask "have you done anything fun to day at work. Did you attend a zumba class, a yoga class a guitar session?"

Now those little points in the back end give me so much information. In the background we can see "this site is the happiest", "this product has the most sense of purpose" "this particular product line has the most amount of development going on because the managers take care of their people".

I can slice and dice and correlate the information in so many ways. I can see that those with a high sense of purpose are also the happiest. So going back to the programmers we spoke about earlier, I can see if there is a correlation between sense of purpose and productivity.

I can take attrition data from HR and see if there is a correlation between happiness and attrition, fun and attrition and it can give us a lot of insight. It can really help us with the next generation as they are very cool and give us so much insight in to organisational behaviour that has nothing to do with traditional HR.

**Fiona:** This really is to my point within this thesis that it is not just for now we are looking at this concept it is actually more about how we engage the future generations of workers.

**Tarun:** Yes, this is so true. What you may need to look at as part of this thesis is at what age will people start to look at gamification and start rolling their eyes? There are countries that I can think of that if you start to roll out gamification in, it won't work because the average age of the workforce is too high. It is certainly something that will work in younger countries better and for that reason I am quite sure that gamification is here to stay.

**Fiona:** Do you have any tangible evidence to say that before we introduced gamification our engagement levels were this and since we have introduced gamification this is the evidence that we have seen?

**Tarun:** Yes, for example with our programmes I have already seen our work productivity increase by 45 minutes per day without people spending the 45 minutes extra at work. This means that they are being more productive. When you start to compute that the numbers start to run in to millions of dollars. We have over 1000 programmes and you can do the math and see how it adds up. It is driving productivity also for our engineers at a reduced or same cost.

**Fiona:** When you were considering introducing this in to the organisation at the start what did you say to the business to get the backing from the business?

**Tarun:** I had to put a business case together but it was very simple. I could simply say that if I increased the productivity of our programmes by one hour a day and x 250 days you are getting some serious benefit. But at the same time I did need to put a serious business case forward because of the cost implications so I also looked at the pattern of people in the organisation.

We started by doing a pilot and gathered data on all levels of employees. You could see that the top 20% worked 10/12 hours a day but the bottom 20% only works about 2 hours a day. The average works 5.5 hours a day, even though they come to work for 8 hours a day. So if I was able to get their productivity up to 6.5 hours a day that would be incredible. But the jump would come to the top 20%. The reason they have to work so much extra is because the bottom 20% is doing so little. So if we could take the burden off the top performers with the same productivity then their work life balance has increased so much then if we weren't doing this. So for me it was more about doing the right thing for our top performers to ensure that we could retain them in the business.

We could also see which groups were underperforming and could focus our activities on pulling them up and we could look at work. Say if we saw a particular group spend 45% of their time on e-mails and meetings, why are they spending so much time on this? You will find that they are completed to link in with their team in Canada or in China and then we could say well this is completely useless let's try to restructure that work. So through gamification we have been given insight in to inefficiencies that we wouldn't normally have found. Only because we have all of this data we were able to find all this.

Fiona: Did you have this data already or this is a result of introducing gamification?

**Tarun:** It's since we introduced it. At first we did a pilot. We took one small group the see the patterns and once I saw this and could extrapolate it to the rest of the organisation the dollar saving was humongous.

So we build a business case on real data by doing a pilot and then went full scale. Now full scale is only in India but can you imagine if I can roll it out globally. However there is an issue on that front in particular in relation to privacy and laws in place in different countries on workforce data.

**Fiona:** One point I am making is that everything starts with the business strategy, then it's the HR strategy, then it is the gamification strategy. Would you agree?

**Tarun:** Absolutely you need to have it linked to the organisation from the start because if you don't and it doesn't work all that you have done is increase your operational cost for no rhyme or reason.

I think that it is so important to have some data to put forward for your business case because going just by your gut just doesn't work. You have to be able to quantify business value to justify the expenses.

**Fiona:** Why is gamification making it different from anything we have had before to engage staff? What would be the one thing you would say to the "roll your eyes brigade"?

**Tarun:** The big difference is that you have a mechanism using gamification to make people behave a certain way without having to give them monetary benefits. What drives me to beat my wives score is my competitive spirit not that I get extra money or that I necessarily have the highest score.

However on the leader board if I see that I am nowhere near the top that makes me feel competitive so the whole gamification concept is based on true behaviour change by making someone aware of where they stand. You are giving them sight that the best guy did this so maybe you can do a bit better. And so it constantly reinforces what is the right thing to do and for people to up lift themselves without the organisation having to do anything for them.

It is about making people aware. Give them the metrics that they need, tell them what an ideal state looks like or what the best person has done so the person can calibrate him or herself and figure out if they can do something better.

The benefits of that are already known to people – for example the benefits of stopping smoking are known to the guy but. In the same way I already know the benefits of doing well at work, I will get promoted or get more money etc. the benefits are already clear. Where people really lack is that drive and motivation needed to take them over.

It is for the same reason you go to work out with a personal trainer. You can do it yourself but with a personal trainer he is constantly pointing out in the mirror that you need to work on your biceps today. Having the trainer gives you a visual of this is how you can look, this is how you look now and they can show you the improvements in a very tangible way and in a short space of time.

So I think this constant reinforce back to people on how they are doing without someone else telling them really helps because them they are self-motivated and self-driven, it's as simple as that.

END

### Appendix E– Transcript of Case Study Interview 2

Interviewee: Naureen Meraj, Global Lead for Gamification Center of Excellence and Employee Engagement
 Company: NTT Data
 Interview Date: 10<sup>th</sup> July 2013
 Length of Interview: 40 minutes 30 seconds
 Number of Employees: 60,000
 Global Revenues:

Fiona: Hello Naureen and thank you for your time.

Firstly I have a confession to make, I am not a seasoned researcher so I am learning myself as I go through this process on how these interviews should go. Let me start by explaining what I am really trying to get at here. What I am constantly coming up against is the industry analyst's perspectives on how gamification will grow. What I really want to know is from the perspective of an hr department what is it giving them and how is gamification increasing employee engagement in their organisation and then can be used as a tool to drive competitive advantage. Basically why does gamification differ?

So perhaps let's start by me asking, how are you using gamification in your business, is it part of the HR function?

**Naureen:** So, internally although we love to work with HR we do have some stand-alone initiatives from them also.

When I say standalone I don't mean that gamification is a standalone thing, it is normally a wedge offering or basically another layer that we add on top of other business processes or business processes. So it doesn't necessarily require HR support. If it's something more along the lines of employee engagement then yes we try to align ourselves with HR and their policies and procedures.

One thing that has to always be clear when leveraging gamification is that there has to be certain objectives that you are trying to obtain. You can gamify everything and anything but if there is no clear purpose as to why you are gamifying it and what kind of outcome you are trying to gain then it is not going to work.

There are case studies and research that has been done that 80% or more of gamified initiatives will fail in the upcoming years, even though it is something that is very popular to use these days, because they don't leverage it correctly or don't use it appropriately. So where it is going to find success is where you make sure there are clear objectives on what you are trying to gain, you have measurable metrics that you will use, those types of things to make sure it is a success and it is sustainable.

As far as any kind of business process goes, whether it is through HR or other areas there has to be a certain flow to a business process and what gamification does is that it enhances that flow. So there might be pain points within the flow of a business process where something is not being done in a timely manner or something is not efficient because of certain obstacles what gamification can do is make it so that the user is incentivised to pay more attention to something.

**Fiona:** Do you have a specific example of a business process at the moment that gamification has helped with that other processes have not done before?

Naureen: One internal example we've made a sales game for our sales people.

The purpose for this was quite simple; as we start to build new products or offer new services within the IT industry we want our sales people to be very knowledgeable about those services. We have certain products that have been around for quite some time and then we introduce new products on an as needed basis e.g. big data, cloud etc. If our sales people are not well versed or feel comfortable about the new products they won't bother with it and we could be losing out on a lot of potential as far as building the relation hip with a client goes by not offering them these other services because our sales people did not know enough about them.

So what we have built is a training game that is for their mobile phones and what that does is every so often when new services are offered by our company its put in to the sales training game so they can learn about the product or service, be quizzed on it and then be able to sell it. They gain points for different things so going in to the module to learn about the new products gain them points, completing a quiz on it gains them points, selling it will gain them points.

With sales people they already receive a commission when they make a sale so just getting a monetary financial incentive may not be enough to get them to learn about new products. They will continue to sell what they know, meet their quota and get their commission check. But how we incentivise them is by offering them things with intrinsic value that would incentivise them to learn more about new products and services.

We give them things that they would not necessarily get otherwise, for example the chance to go to an exclusive conference, lunch with the CEO, and recognition from the CEO of the company. Really these are the type of things that really get them in the limelight as an expert in relation to a certain product or a certain offering.

**Fiona:** Am I right in saying that you offer tangible rewards because a lot of my reading has been about using virtual rewards?

Yes, we did start out offering more tangible rewards such as an I-pad, and we found that those were not sustainable motivators. How many of those can you have? To know that everybody looks up to you for something, the higher executives come to you when they have an important client. These are things that don't have a price on them. When you are motivated to do something from your own internal place then that becomes a self-motivator. And we have found out that this lasts longer.

We've seen that these intrinsic psychological rewards really get people to want to do more because they want to sustain that recognition. Getting another I-pad is not all that interesting, you have one, what are you going to do, get the next updated version? How many do you really want? Monetary rewards especially for sales people who get a commission check any way is nothing new but to be continuously recognised as something great in the field, that goes a much longer way.

It motivates you to always stay on top; you always want to be the best of the best. Who doesn't? So that type of recognition, it has more meaning.

**Fiona:** Have you found it easy to introduce the concept of gamification or has there been push back from some of the sales people?

**Naureen:** I suppose that depends most on the individual and who you are talking to. We did have a bit of push back but that is because there was a lack of understanding. You have to make it very relevant, we have sales people for different verticals or different branches so how we use gamification for each of them will be different. Part of the process is to help gamification be relevant for them. Even if people hear about it, until there is full understanding on what you are trying to do there was a lack of motivation to use it. But that is often the way when you introduce something new but once we were able to really tie in specific examples it motivated them to learn more about gamification.

In relation to selling it in to a business sometimes it is important to name things in relation to their core objectives. If the word gamification is too much "fun" than you need to make sure it is relevant. You can gamify everything but if you don't make it relevant to the needs to the business it won't work. So going into a business conversation you need to research how gamification is relevant to them, using case studies, and understand what the real issues are you are trying to address. That's where the change in attitudes comes from.

**Fiona:** Going back to your internal use, when you first came to the board to introduce the concept had they heard about the concept or did you need to put a business case forward for e.g. the sales game you have?

**Naureen:** Going back to how it started, was more on the employee engagement side. I introduced it to people in the organisation to engage people in the org with their everyday tasks. To get them to be more engaged with their work, enjoy their work more and be more innovative in their work. What can happen in a consulting environment that a lot of or consultants on our large accounts feel they are off on their own island, they feel disconnected from the parent company. We were seeing that they felt more like they were part of the client environment then the parent company.

We came up with an employee engagement initiative and I used to get them more involved with NTT Data and feel like they are active participants in finding solutions and bringing forth innovative ideas. So when we saw the success that came from that initiative and specifically gamification had a big part in that our CTO who is very much an out of the box thinker he really liked the idea of using something so out there as a way to provoke enthusiasm and promote higher innovation. He decided that it would be a good idea to apply this to other areas of the org. We did have to get some buy in to show how it was successful. He did recognise that gamification was up and coming in some industries but barely scratching the surface in IT. This was 18 months to 2 years ago. We tried to really leverage gamification at that point and see how it could be applied to different areas.

We did have to try to make people understand, people hadn't heard of it. Now 18 months to 2 years later everyone has heard of it but they don't necessarily know exactly what it is. They know something about it but not enough so there is still a lot of education we have to provide around it and around what it is and how it can be used in the business but I think over the next year or 2 it will be much more widely used. That doesn't necessarily mean it will always be successful because people don't always understand how to make it relevant, how it's aligned with core objective but I think people will be experimenting with it a lot more.

**Fiona:** You mentioned that the first time you used gamification was with employee engagement, what platform did you use for that initial project?

**Naureen:** It wasn't an online platform, it was an offline team building concept but we gamified the strategy like to make the employees feel like they were part of the solution, we made sure that we created environment where employees could feel that they could be candid enough to participate in conversations. We brought a group of employees in for a workshop and got them motivated to speak up by putting people in smaller groups and set them a

challenge of some sort and have them compete with each other to come up with the best solution. So the competition factor, gaining points to come up with ideas, all of these things motivated them – these were all game mechanics. The group that come up with the best idea, not only were you the winner, we will actually use their idea and brought it to fruition and management funded it. This way employee's felt that their voice was heard and they feel recognised and they were part of coming up with the solution.

One pattern that we saw coming across employee initiatives in general was that most employees wanted to get better training on how to become better leaders in the organisation. Not necessarily to be a manager but to be an expert in their field or get a promotion, basically career progression of some kind. They also wanted to be recognised and rewarded somehow for becoming better leaders. So we came up with our leadership game. Employees can participate and complete certain modules that can help develop their leadership skills and as they complete the modules and the different levels in the modules they gain points and there are many different aspects to that.

There are game points for developing these skills, management is able to track how they are doing in their development, how they are completing the modules which allows them to sort of be contenders for different promotions and opportunities and then there are recognised for that and we have the intrinsic rewards that come with that.

This gamified platform is called the "Ignite" platform and this is what we use for all our gamified concepts.

Fiona: What is the age profile like within the business?

**Naureen:** It varies, through different acquisitions we have had legacy accounts that have been with our company for decades and we have had people working here for just as long. Then we have a whole population of fresh, young employees just out of college that are 20 something that are just coming in to the organisation. It really varies. Yes, gamification is something that is more popular and more familiar with the younger population , the20-30's as opposed to people who might be in their 50's but you'd be surprised because the average gamer is actually 38-39. They grew up with some kind of gaming experience, all be it the more traditional gaming platforms but never the less they understand the engaging factor behind it so they are fairly open to utilising it especially when you can make it relevant to a business process. So it varies, it's across the board.

**Fiona:** Are you in the school of thought that gamification is here to stay as a way of achieving competitive advantage or is it the latest buss word?

**Naureen:** Oh yeah definitely. I think it is here to stay at least until the end of the decade if not beyond that. I think this is the decade for leveraging gamification. I don't think it has reached its peak yet. I think we are still learning a lot on how to use gamification and use it appropriately so that's why I think it hasn't reached its peak. We are finding new innovative ways of using game mechanics to really enhance work flows and various business processes. I feel even if in years to come we change the buzz word, I come from an educational background and the concept has been around for years. We used to call it the token economy.

So we may change the word we use but when you strip it back what gamification is really is behaviour modification. I think you will always need to know how to modify or change behaviour of the users to get a certain outcome. Whatever you call it the concept will be there for a very long time. It's a very interesting process and you can do so much with it. It really covers such a broad spectrum of uses and because of that very reason we have yet to discover all that it can do for us. But it takes a bit of research and thought before diving in to the use of it. You need to understand the psychology behind it and use it appropriately. That is a big step 1 factor in the criteria to make it successful. So as long as you have someone who can do that in an organisation, that is really useful in finding its success.

END

#### Appendix F – Transcript of Case Study Interview 3

Interviewee: Sameer Bendre, Chief People Officer Company: Persistent Systems Ltd Interview Date: 15<sup>th</sup> July 2013 Length of Interview: 37 minutes 53 seconds Number of Employees: 7,000 Global Revenues:

Fiona: Thanks Sameer, let's start by discussing how you started using gamification with Persistent?

**Sameer:** The whole idea for us came from 2 or 3 basic trends that we were seeing. One is the movement from oral communication to communication on the net. We noticed that there is not much paper communication going on anymore and things such as certificates are not really prevalent in using for merit anymore.

Secondly, it how the human mind works. The human mind does not understand word, it understands images. Whatever the human mind stores something it stores is as an image e.g. if you want to get a person to quit smoking don't tell him "don't smoke" because every time you tell him this he thinks of a cigarette. If you tell him to start looking at an apple and help him to start thinking of an apple his mind will start thinking of an apple.

If you put these two concepts together – what images really stay in our mind? If you see a movie, the scene is continuous with a story attaching them. The movie will stay in your mind because of the combination of the image and a story. These philosophies hold something. Nothing engages a person more than something where a person talks to someone else, interacts with someone else. All these things together really give the idea that gamification may really be something that holds appreciation.

Thirdly, traditionally what I have being seeing is that the way to appreciate people is to reward a person by giving a person some monetary benefit but what we need to realise is that it is not just the monetary benefit that is really going to engage a person to get them to come and stay with the company for a long time.

Also around the time when we started to look at all this we looked at the popular game called Farmville and looked at this to see what all this was about was. Why were people getting so much satisfaction from this by asking a friend for stuff and why did people really enjoy building their own farms.

So it was all these things that came together for us when we really had our discussions on this and this led to us thinking about an idea where you have the whole employee engagement piece and seeing how we could provide something where people might get satisfaction from building something for themselves like Farmville. We asked if people want to do this on Facebook would they want to build something of their own to get credits? Something like a house, that would tell them about how they are doing as a person, how they are doing in their performance or with their accounts. We asked, can we build something like that? That was one of the basic ideas that came in to our mind.

We started and created an independent framework where people could create things where people felt that they have hard earned and something they can show and share with people and say these are the things I belong to. A person who does some good work in the organisation builds his own house and decorates it etc. and then he invites his friends to look at it and what he has collected. You can show people around where you live etc. This is the concept that the whole game is built around and what we have used.

For your performance feedback you ask your friend to come and view your house and he asks how did you get this? He says it's because I did a particular project really well and he gets the appreciation and he feels proud of the trophy he displays in his house.

This was the whole concept of the first platform for gamification that we built for HR.

**Fiona:** Was there a particular business need that made the business say we really need to look at this e.g. attrition or low engagement levels? Was there any kind of a trigger that led to this?

**Sameer:** I really wouldn't say that there was a direct trigger that led to this but we realised that we have moved to a more Facebook like culture. We wanted to look at how the other facets of business could move into these lines.

IT as a function is now moving in to apps, social collaboration and mobility, analytics. All these things together are really taking the whole IT world to the next level and when IT moves to the next level how are the people who are the main backbone of IT going to react. What will they need? What will help them to keep excited? These were the things that really came to mind and not really that I have a problem e.g. attrition is high or I am facing an employee engagement issue. It was more that people are going to be spending more time on the Facebooks of the world and I need to look at the internal aspect of it to see how I can use it to engage people and to appreciate what they are doing.

Fiona: So was it was more around future proofing rather than reacting?

**Sameer:** Yes, if you know the IT industry, it went through major changes in 2008. That is when we started to look at external innovation, our processes, which processes do we need to innovate, what is the future of these processes? That is where gamification and HR came together and had a brain storming session.

Fiona: Do you think a factor in it is the age of your workforce?

Sameer: The average age of my 7000 people company is 26.

Fiona: Do you think that has an impact on how people use and engage with gamification?

Sameer: Yes, it certainly does. The younger generation look at this a lot more.

**Fiona:** Do all 7000 people use the platform?

**Sameer:** Yes. A couple areas that we have locked on to that are completely on the gamification platform are our continuous appraisal and performance and our rewards and recognition systems. They are extensively used and can only be accessed through the gamification platform

Other areas are less used are areas called peoples likes and dislikes. People use them but they are not mandatory but people use them to indicate how they are feeling, how their work is going on.

The other aspect is to provide some options for external sourcing of goods from different sources. You are creating the demand and able to get better purchasing for people and help them to take advantage of economies of scale e.g. If a person wants to buy a dozen apples and you want to buy a dozen apples and 20 other people do to, then we can get together and get a better discounted price. It is a completely different application of it but people seem to like it and get satisfaction with it. We have just provided the platform only; the rest is up to the people to sort out.

**Fiona:** Do you use the information/ data/ analytics that you pick up towards the development of the right people for the right roles?

**Sameer:** We have tried to do that and have some plans on it but we have nothing concrete yet. We know that this can lead to this eventually but we are not there yet.

**Fiona:** Going back to employee engagement, by using gamification do you think you can actually increase your engagement scores and therefore benefit from the knock on effects such as increased productivity and competitive advantage? Do you think that is the case for you? Do you have any evidence for your own organisation of how this might have happened for your organisation?

**Sameer:** Directly I would say yes that people do get more engaged if people are involved in healthy competition or are in a race with people and through gamification we can display how this really helps a person get involved in the organisation. I will look to see if we have any tangible metrics.

**Fiona:** What I am hearing is that you use this more to promote competition, you have 7000 people everybody is aware of what everyone is doing, everyone is involved in it, it's a social cohesiveness that you have that overall is getting people more engaged in the organisation and getting people to feel more as a team and creating healthy competition between people.

Sameer: Yes, absolutely

Fiona: Are all of your rewards for people virtual rewards?

**Sameer:** No, we have rewards that can be vouchers for malls and shops etc. There are 2 things all people know. One is that the monetary rewards are going to be limited and the second is that not every activity that you do is going to get a monetary rewards.

There will be some activities that you do that you will only get a gracious thank you from your boss or your bosses' boss or some senior person in the organisation. That is how we manage the mix of both these two. There are activities that have non cash benefits.

What people really like through this is the concept of getting recognised and being noticed. The engagement through the gamification is through seeing if you can get noticed in the organisation. You will get noticed by people giving you rewards and gifts like someone working in the finance function can give a gift to someone in a completely different department because what he did helped the finance guy do his job better.

Monetary rewards are hierarchy driven, there must be a manager a party to it somewhere but with this it is not. Anyone can do it for anyone, including their boss; there is a 2 way flow.

You can give anyone brownie points and you are creating better people in the organisation to help each other and that is what is really engaging about it for people.

Fiona: And it can be done on a daily basis, not once a year?

**Sameer:** Yes, it is continuous and sometimes the feedbacks are really small. You do something small for someone and your customer gives you a pat on the back and says thanks for helping me out with this problem of mine. You can give acknowledgement and some small reward if someone helps you to solve a problem and you want to say a simple thank you. It creates a more collaborative organisation for everyone.

**Fiona:** When you decided to introduce it in to the business did you find it was a big job to get 7000 people to take it on?

**Sameer:** Yes, but we did it in smaller groups. We went function by function. We went to the finance function; the legal function etc. and we then went to bigger groups. Sometimes we went by location and then we went to the sales guys etc. We wanted to give each group enough time to understand what we are trying to do here. We didn't just want to go across to everyone at the same time and say "hay this is a new platform to use, go ahead and use it". We wanted people who were participating and managers both to enjoy the platform.

**Fiona:** Do you believe that helping people to understand what the business benefit to gamification is in order to get their engagement with it?

Sameer: yes, but people also want to know the "What's in it for me bit, this is a big part.

**Fiona:** The word gamification do you have a problem with it or do you think companies will have difficulty introducing it with that terminology? Have you heard of serious games instead?

**Sameer:** I never thought of it from that angle. To me serious gaming means something completely different. A serious gamer to me is someone who is playing a game on the net to someone who is very in to playing a racing car game. Quite frankly I have never thought about it.

**Fiona:** Would you be of the impression that it is still quite new, it is still being developed and companies are still trying to figure out how they can use it?

**Sameer:** Yes, I agree that it is still very new. This is an exciting thing for now but still people now don't know how long this will last or is it sustainable for motivating people. When you introduce something in to a corporate environment it is different than introducing an app or a game in a private setting. You can't just replace it with a new app or game if it is not working in a corporate environment. It is not easily done, so the sustainability of this thing is still an open ended question. It is still so new we don't know if peoples interest will be sustained for a long time or if people are really going to be interested in building their own castles through gamification or building their own points tables or whatever it's going to be. How are you going to work out if it will work in the long run, only time will tell how it will go to the next level.

**Fiona:** But in your business you feel that it is contributing to the engagement of employees, yes it is contributing to our competitive advantage and yes it is here to stay for a while?

**Sameer:** I definitely think it is contributing to engaging our employees. For a 7000 people company with the average of an employee being 26 years old we have a lot of people who are fresh graduates, fresh coming out of college and for them this becomes a good

engagement. It has sustained for us from an engagement perspective for the last 3 years and we believe it will last for another few years. We will have to look what is needed next.

**Fiona:** What kind of a cost investment is that for the organisation, I would imagine it is significant and therefore they have to have a strong business case for investment?

**Sameer:** Yes, I am sure it is significant but for us it was not so much as we developed our own gamification platform and sell it to companies, so we eat our own dog food.

**Fiona:** If there is anything more in relation to the metrics and the figures keeping in mind I am trying to prove how this is connected to employee engagement and then knock on to competitive advantage?

**Sameer:** Basically we are primarily dealing with a much younger generation. A generation who individually when you talk to someone one on one they are completely different to the person that goes on line to talk to people and interact. This is someone who likes feedback, someone who likes to know how they are doing. If we can provide this to them in a way that is very easy to digest people start to understand the effect this can have.

If you and I do a job together and afterwards our boss gives you a virtual Ferrari and me a ford, I will know straight away how I am progressing and I can say to myself I could have got that.

I think that a really important part of human psychology is that humans are the only ones that don't hunt when they are hungry. Every other animal will only go and hunt when it is hungry, we will go and hunt even when we don't need things. That is human psychology and if you can do this and let the other guy win with you than why not. It is not always that when I win you have to loose. The both of us can win at the same time.

END

### Appendix G – Transcript of Case Study Interview 4

Interviewee: Abhijit Atre, Finance & Shared Services Manager Company: Redknee Technologies Interview Date: 18<sup>th</sup> July 2013 Length of Interview: 31 minutes 34 seconds Number of Employees: 200 in India Revenues: Unknown

**Fiona:** Hello Abhijit, thanks for your time today. Let me start by giving you some further background on what I am trying to achieve today. What I want to provide through my dissertation is to provide a source of reference for companies currently considering using gamification in their businesses so they can use this this as a resource for their business case. What I am really focusing on today is how gamification can impact internal employee engagement and therefore the knock on effect that it can have on measurable ROI and bottom line competitive advantage.

**Abhijit:** well let me start with the background on how we decided to go with gamification. So we wanted to do something with reference to e-learning and typically normally people look for a central repository system where e-learning is standard stuff. So we started looking at a portal and then came across the concepts of gamification. So we said ok let's explore this. At first it looked like more than what we were looking at. On one hand it had the simplicity of using concepts like Facebook and all these social media platforms that were coming in to market but also ensuring the our content was not compromised and a way that we could improve enthusiasm about our e-learning portal. So we said that we would explore it.

In the end I can say that working on a portal such as ours for e-learning is far better than using it on its own.

**Fiona:** when you started first looking at it, is it from your own thoughts that you think this would be good, or did you pilot the programme or were you provided with case studies from the people you spoke to about using gamification?

**Abhijit:** No I would say it was more related to our own enthusiasm. We didn't want to go with somebody else's success stories. We wanted to really do something new for us. Being in the IT world we wanted to look at what's new, what's different? Redknee is not a large company; it is a 200 person company. My job as the general manager, it is up to me to get something new that will motivate and excite the employees on a regular basis. So it was more than what other people think. We thought this was a very cool tool that can give something that we wanted and in a very attractive format.

Fiona: When did you introduce it?

Abhijit: It's close to a year now

Fiona: Do all 200 employees access it?

**Abhijit:** It is supposed to be accessed by 200 people but like in all large groups you will find that some people are not so keen on using it. But all people have access.

Fiona: So you don't make it mandatory, it's a choice?

**Abhijit:** It was made mandatory but at the end of the day it's the employee portal. If they feel the urge to go in to it, the number of times they do they will get certain star points etc. But at some point in time we as management said, look if they don't want to do it then there is no point in pushing them. We don't force anyone to go in to the portal.

**Fiona:** Does that mean then that you have moved from using gamification as one application for the e-learning system to now it has moved to being the entire employee portal?

Abhijit: Yes, absolutely that is what has happened.

**Fiona:** Do you think then for example if I go back to linking gamification to competitive advantage, do you think there is any link in that for you?

Abhijit: Are you looking at it from an employee aspect or company aspect?

**Fiona:** For example through increasing employee engagement and getting people more intrinsically motivated in the organisation and wanting to learn more and become part of the organisation then that will have a natural knock on effect on retaining staff, getting them to be more productive and therefore have a knock on effect.

**Abhijit:** I would say from an internal perspective it is definitely a big advantage. I would say that within any industry there are challenges around training. Companies simply don't have budget for training employees. What this has allowed us to do is provide this very close to free of cost to the business. We are able to offer management training and leadership training on-line and get people engaged in completing it. If we look at it from a business perspective money saved is money earned. We have captured the needs of training on the portal and by adding gamification people have suddenly found it as a very cool factor. The more and more people get educated we are seeing the value of that. The company who said no to training is suddenly seeing the feel good effects of giving training to employees. So in that sense it is definitely an advantage for the employees.

**Fiona:** So in that could you then link their increased knowledge and training to having a knock on effect on helping to be ahead of the game in the marketplace?

Abhijit: Yes, absolutely

Fiona: What is the age group of your workforce?

Abhijit: On average they are around 30 years.

**Fiona:** Do you think that influences the engagement in the use of the gamification platforms you have?

**Abhijit:** Yes, definitely because the new generation is the social media generation. Even if you go back 10 years people were more conventional in relation to reading books and watching television. Exploring through books was so much more popular then social media. These days' people don't necessarily want readymade content. For this generation it is definitely better to have this kind of approach.

**Fiona:** Do you think the word gamification is an issue if you were going to the CFO or the CEO?

**Abhijit:** In the initial phases we were sceptical about what is this "gamification". Games are more associated with children and fun and not serious work. However, I think the industry is maturing and people outside the industry and in the world are also maturing. If games can become a source of income then the resistance will decrease. We came across initial hesitation but it didn't take a lot of time for us to get over it. With me as management and the employees. I would say that you have to help people to understand it and then it becomes more easily acceptable. As soon as you start linking it to increased productivity or impact on the bottom line then you will no longer get the raised eyebrows.

**Fiona:** Do you monitor the use or have on going statistics to show the impact or benefit it has on the bottom line?

**Abhijit:** We are actually not trying to do this so far but this is one area that we would like to see. As we get more data we want to see the impact and how it has changed.

**Fiona:** In relation to how you integrate in to the business, I have come across a phrase that says that gamification can't be the "sprinkles on top of the ice-cream". You need to identify the business strategy and what you are trying to do and have gamification integrated in to a business need. What are your thoughts on this?

**Abhijit:** This is bang on. Who ever said this said it perfectly. It is not a stand-alone product. There is a whole process that you must carry out in relation to why you want to do it. Huge thought process was put behind this before we went in to it.

**Fiona:** It is very encouraging to hear that you are using gamification in a company that is 200 large. It is good to see that it has application in smaller business also. Do you think however that you might have been helped by the industry that you are in and that people are very used to technology in their everyday?

**Abhijit:** Yeah but these days who are not in to technology. As a business we are more in to software so this doesn't have anything to do with that. Even if you go to manufacturing industries these days, maybe apart from people who are on the shop floor, have access to technology. It helps now that everyone is using technology. It is not an excuse now that you don't use technology because everyone does.

**Fiona:** With the platforms you are using, what kind of rewards and incentives do you give people? Is it monetary or intangible?

**Abhijit:** We have a combination of tangible and intangible incentives. On a day to day basis we want to incentivise people. Initially what we said is the number of likes a person gets on the portal you will be recognised. We called this the "attraction quotation". The more likes you have, the more popular you are in the organisation. Then what we did is the higher you are on the attraction quotation we gave you gift vouchers and we extended that to one year. We have designed a whole landscape around this is what you are doing, this is what you should be doing to get higher, this is the bar that has been set. If you achieve all these then this is the reward you get.

**Fiona:** Do you think that is an important element in it, showing people "what good looks like" in the organisation?

**Abhijit:** yes, I think what happens is if you see the overall lifecycle on day 1 everyone will use it and as time goes on you enthusiasm drops down and then you need to rebuild it. These kinds of techniques help to ensure that the incoming traffic is consistent and there is a regular flow of people and there is a consistent track of people. The incentive is more for people to go on to the portal and make it a habit.

**Fiona:** What else is on the portal?

**Abhijit:** All of our training, soft and hard skills, all of our policies and procedures, it's like a complete company intranet. In addition we have added chat forums and discussion forums and business forums. So getting people on this brings people to the one place in the organisation and helps people to share information and be more collaborative. It also helps them to get to know each other. It is a way of gathering people together in the one place to identify with the company in the same way and get quick access to information and problem solving.

**Fiona:** the element of having more fun work environments and cultures in organisations as hierarchies break down and as people want less of a distinction between work and play. Is that something that came in to this for you?

Abhijit: I am not sure; we have not discussed this scenario.

**Fiona:** I have put together a conceptual model of areas that I feel are drivers for employee engagement in today's world of work and how these are impacted through gamification. For example, one element is "giving continuous feedback". Do you think gamification has the capacity to contribute to this?

**Abhijit:** Yes and no. Yes because it is a continuous process but no because it is not taken so seriously in that case. Yes in that it is an open portal and people can make comments and give feedback when someone has done something well and tell them that they like their work etc. there is a feedback mechanism but it is too open to take it seriously.

**Fiona:** Are people using it to increase their profile in the business for potential promotions in the business where people are using it to show that they would be good candidates for development because they are interested and engaged in the organisation?

**Abhijit:** Yes, that is a big area for us. For example what we have created is something called the "innovation board". What people can do is to post innovative ideas to that board, the more they do it the more points they get and the more they get recognised. It is a free area where everyone can see it, right up to the CEO so that increases the chances of you moving up the ladder. If some of the ideas get accepted or the company files a patent then it moves to the next level. So instead of moving through the traditional channels you get straight to the point.

Fiona: is that something that is widely used?

**Abhijit:** Yes, absolutely. This is a real driver for people. People want to feel and know they are making a contribution to the business

**Fiona:** So, to finish up as I am conscious of the time one final question is really in relation to your experience of working with gamification is this something that is here to stay?

**Abhijit:** Yes, one of the things that I am looking at is how to take it to the next level. Say, if I decide to move on to another company, this particular experience and all the achievements that I have had in this business how do I take all that with me? How do you get them linked to other portals such as LinkedIn etc.? It is like my CV floating around in the market for people to see. How to make your private information more public? Everything is still in the early stages and people will take time to mature and grow to the next level but I definitely think that this is here to stay and move forward. It may evolve as people learn more about it.

#### Appendix H– Transcript of Case Study Interview 5

Interviewee: Erika Webb, Senior Manager, Applications User Experience Company: Oracle Interview Date: 18<sup>th</sup> July 2013 Length of Interview: 51 minutes 21 seconds Number of Employees: 10,000 approximately Revenues: €13 billion

**Fiona:** Hi Erika, thanks so much for your time today. Just to give you some background let me start by giving you some further information on what I am trying to achieve today. What I want to provide through my dissertation is a source of reference for companies currently considering using gamification in their businesses so they can use this this as a resource for their business case. What I am really focusing on today is how gamification can impact internal employee engagement and therefore the knock on effect that it can have on measurable ROI and bottom line competitive advantage.

What I have come up with at the end of my secondary research is a conceptual model that looks at the drivers of engagement in today's changing world of work and how gamification can be used as a tool to support those drivers such as intrinsic motivation, making work environment more social and fun, giving consistent feedback etc.

But I have come across quite a few brick walls when speaking to the guru's and the industry experts when I have asked them if I can speak to their clients etc to get primary evidence. So what I would like to discuss with you is the practical applications that you are using it for within Oracle.

**Erika:** First of all are you only looking for HR examples? Because if not there is a company called Redcritter who have a gamified version of project management. Those guys are super friendly and might be good for you to speak to. It's a really

Anyway, for me the whole concept overall I just think is just so interesting. One thing that we run in to especially in HR for example are cases where people are supposed to do something but that doesn't mean that they do it and it doesn't mean that they want to do it. So in terms of engagement one of the things that we've looked at in terms of where would gamification be a win one concept is to look at things that people don't really want to do but that management would like them to do. So from the HR perspective let me give you an example we know that people often people need to fill in an annual performance appraisal. People go in once and year and create their goals for the year ahead and then you don't look at it again until you get some notification to say it's time to do your appraisal and then you open it up and say oh oops I just realised I'd said I was going to do 3 courses over the next year or I said I was going to do X and I didn't do that either and you suddenly have to figure out how you're going to balance it. If on the other hand it was something you did more regularly you can get around that but another concept is maybe you can use gamification to look at these things. If you get midway through the year you can adjust what you said you would do or you have a reminder to do it. Maybe a way to make those more useful is if you could get people in to the system more often to look at them and then both the manager and the employee have a little bit more insight in to what they are doing more regularly.

We have also looked at gamification for on-boarding processes. It's a funny problem because when you are bringing someone in to the company as a manager, it's a painful process. When you're bringing in a new employee you are trying so hard on the day that they land that they have access to the network, a computer and an e-mail address that you don't really spend much time integrating them in to the team. But there are also a lot of aspects from HR that you have to do with the employee after they start and no one is ever too sure about what the next steps are. So we thought if you could have a gamified process for this it would make things so much better to help to lead you through a process like that.

These are ideas we have at the moment, these are not products you can buy at the moment. We are trying to think about the types of HR processes that we can put game mechanics in to try to help them to work better. You were talking about the changing spectrum of employees these days and I think sometimes these days people coming in to a big company these days feel is that there is a lot of sense that they have less transparency on what they need to be doing and less feedback on whether they are doing things correctly. I think mostly people who are 40, 50, and 60 that's sort of the way things are, they are used to it, they don't care. But when you start talking about people in the teen, 20, 30's they have come up through an era of having tonnes of information constantly. I have 2 daughters in high school who check their grades on a daily basis. It's all posted on line. They can tell when a teacher hasn't posted a homework grade or an exam grade. They're looking at it all the time and they are looking for that feedback constantly. Where am I, how am I doing, where am I in the system? We didn't do that when I was in school. They are a more constant feedback consumer. They have a sense that they ought to know immediately how they did on something, how they did on an exam. What their scores were, how they did on an exam. They are looking for that right now feedback and I think it's something that companies have to adjust to. If you can figure out a way to make processes more engaging it's going to be a lot better for your younger employees because they are the ones that require more feedback, more information on where they are?

**Fiona:** Do you think that is in relation to the quantified self and judging against yourself and where you are supposed to be or is it the competition factor with others that is the driver?

**Erika:** I honestly think that depends on the role that you are in whether or not the competition with others is a useful thing. For example with the on-boarding example it not about competition with others it's about figuring out I need to get on with this and I need to figure out where I am. If you were to throw a leader board on that, it wouldn't make any sense. They're not trying to win against others in that situation; they are only trying to figure out where they are supposed to be. So I do think it does depend on what's the person trying to achieve and what kinds of feedback would be useful to them.

I know having looked at a bunch of data another one that I am interested in from the perspective of my role in the user assistance group which really looks at anything that helps someone to get through their task. One of the things we have looked at is training. How could we improve training with a gamification tool. You end up having to do these corporate training things and they are usually really dry and boring, they are difficult to get through etc so we looked at what could we do to make them more interesting, more engaging and help people to remember what they were supposed to remember. This is a non gamification example but we actually looked in to comic books as a training tool because one of the things we have run in to is that people feel that the training materials they get are so dry they find it really hard to be interested in it all. So when we put out a comic book version of new features we wanted people to look at we could actually show that peoples performance was better when we tested them on an interface than when we did things on a PowerPoint. People reacted to it in an affective way. They said the PowerPoint was intimidating and just looking at it but the comic books were fun and it made me feel like this can't be hard. If they put it together like this I would try it and I would learn something new.

I think gamification has the potential for the same type of thing. If you can get people to see training as a little bit more interesting than people would be more interested in getting involved. Companies have a whole heap of things you want people to know, you really want them to remember that and need to make it interesting and engaging enough that they do take it away. I was working with one company a while back, a retail company, where they put a high premium on their customer service; this was their niche in the marketplace. You walk in here and we guarantee that the person you talk to is going to be knowledgeable, if you ask them what the difference is between this cheese and that cheese they'll be able to give you a long description of the two, if you ask them the difference between regular cotton sheets and Egyptian cotton sheets they can give you a long list of things. But those training activities take a huge amount of time and they take people off the floor and are not selling. So basically they were saying that it's a real conundrum because you need people to know this and need them to understand things that they are talking about when they are selling but at the same time every time you take all these sales people off the floor they are not selling and the company isn't making any money. So if you can figure out a way to gamify that. I have seen this app that does this. It's a company called slalom consulting and they have regional offices in the US and they support companies in their regional areas. So the people in Denver stick to the Denver area. The problem is that the people in the regional offices don't know each other .So they created an app just to try to get people to know people in other offices. They did it so it would be funny, they'd show you a set of 6 pictures and it would say which one of these is so and so. If you got it wrong it would start giving you hints but silly hints like, their first car was a beetle. Just real silly things, like favourite colour is blue. They originally had it set up that they wanted individual people to play it and they found that 50% of people were using it and 50% were not touching it. So then they made people work in teams and the teams were competing against each other. Once they did that the usage went up to 98%. If you were on my team people were like "why haven't you played, you have to get in there, we're losing". It was a great use case for breaking down barriers and getting people to interact etc.

Then he pointed out that you could use this for anything and they actually developed it to train mechanics on parts for planes. It would show you 6 different planes and say which one is this and if you got it wrong it would give you hints and say "it's got a 42inch wingspan".

I started thinking this could really work on this kind of problem where you need people to know the difference between Egyptian cotton and regular cotton, you could just set it up so that they could play that game on their phone during down time and get up to speed on all the things they need to know about their job without having to pull them off the floor for training and because it's a game people play it multiple times because they want to improve their score. And another thing is that they probably don't even feel like they are training at all. Corporately there is a lot of discussion about whether or not people have this BYOD (bring your own device) to work and people more and more it's become the norm especially with digital natives. They want to use their own toys, they know them and want to use them where ever they can and so some companies have a real problem with that and some companies are starting to realise "well that's not a bad thing" because if you can get people to do training on their time on their devices then that's a complete win.

Given the changes that are happening in the world in work is the notion of less of a divide between work and play and less and less the notion of Monday to Friday 9to5. I know one of the things for me is that I work for a major technology firm. If I have an internet connection I can work from anywhere. When I get up on the morning and when I am making my coffee I am checking my e-mail on my I-Pad and responding to things that need an urgent reply. When I'm out at the weekend I'll scan things on my phone. It's become this thing that it's not as simple as I go to the office and at the end of the day I come home. It was that you had your desktop computer and you had your files on that computer and when you got home you had no way of accessing them. So you didn't go home until your work was done and once you were home you were done. Now I don't think that is the case for anyone. It's self-selected though because people are never unplugged. But it also makes life so much easier, my boss was on holidays recently and I really needed her input and luckily she was checking her emails and could respond.

Fiona: So tell me in relation to within Oracle are you using the term gamification?

**Ericka:** Yes but I tell you I got a lot of resistance to the term gamification. What I try to do is say it to people is that I talk about it being an issue of engagement and these are tools to help you to engage your workforce. If you talk about it as gamification you get a lot of "we're oracle we don't make toys, we make serious software, don't talk to me about turning it in to a game". I think the term like it or not is just becoming to term and as much as people hate it because it trivialises things I think it's going to hit that point where It is the term and people will just get over it and it will lose some of its meaning in a sense. That said we try to talk about how gamification is an aspect of user experience. It's something we use to make things we already know have good usability a little but more transparent and a little bit more obvious.

We try to do internal engagement with folks that concentrate on the idea of these are all things about the user experience that people already know about e.g. people like feedback , gamification is just a way of giving them feedback in a different form. Don't get focused on the badges get focused on the badges as feedback on how you are doing. That's all that we are doing we know that people like feedback, through gamification we are just packaging it differently, we are making it more transparent for people. But at the end of the day it's still feedback.

People need to know they are making progress because they have a feeling of being disengaged if they know that they are not getting anywhere. It's hard to come in to a job every day and have a sense of "am I getting anywhere" with this so progress indicators are things we already know that when you are giving someone a flow through a set of things they need to do they need to know where they are, they need to know what's left, they need to know what else do I need to do and help me plan when these things need to happen. That's just good user experience. We know that that's something people get frustrated by. If you hit a button on something and nothing happens you get frustrated by it and you don't know what to do. You expect something to give you some feedback that what you just did is doing something, anything.

If you think about it like that a sense of feedback, progression, a sense that you are mastering tings those are just good user experiences and what I find is that if I talk about it that way I see a lot less resistance. We say look this is something that the user experience is about.

Mario and a lot of folks come at it from a slightly different angle. He will describe how everyone plays games, people play games all the time, even if they think they don't play games they do because people like them and all we are doing is take those aspects and put them in to software. I find that does not resonate well at Oracle, if I say that everyone plays games I get stony face looks.

**Fiona:** It's one of the oldest philosophies in business theory from day 1, business strategy is a game, and internal politics is a game.

**Erika:** exactly, there's games people play all the time. People give themselves goofy little challenges all the time like can I get this expenses report done by 5 o'clock and so in that regard I think Mario is right but when I try and sell this internally I lose half my audience because they are thinking that we have a hard core set of software that we make our money off of and we don't want to trivialise it. If I talk about it as user experience and how it engages people and helps people to be more involved in what's going on with the company and their own career then that's a very different scenario. People get it and understand it more.

**Fiona:** Are you are the stage in Oracle that you are still doing the internal sell and putting your own business case forward for it?

**Erika:** We're doing a little bit of both, what we've got it we've just had the big "birds of a feather" meeting where 60 different people who are all looking at gamification in their areas within Oracle got together. This spanned all sorts of areas from internal application where they just want to figure out how to get new sales consultants trained up and on boarded to external things that they want to make available to customers. I've been taking a role of doing more evangelism and doing training roles to try to get people to think about it but its definitely at that point where our health finances global business as a whole serious of applications that are gamified that will be coming out this summer. It's a little bit past the preliminary stages but a lot of things are still in the concept stages. In such a large organisation there are going to be pockets that are going to get excited about it early and some people are more forward thinking and always watching trends. Some organisations aren't. It's a resource competition at the end of the day. You have x resources and you've got to get things out the door, whether you are going to put your band width on gamification depends on whether or not you think it's a marketplace win.

**Fiona:** Through your work in that where are you getting your metrics and data to be able to say "we need to be placing our bets on this" or should be at all?

**Erika:** You know we have looked at t a lot of this as how we need to be competitive in the marketplace. So when you see other organisations starting to do things like gamification that definitely creates some momentum and we don't want to be caught with our pants down on this. So as this becomes more public and as you see other big companies announcing gamification initiatives it definitely changes how things are done and suddenly people are interested in what we are doing. The tricky bit is relay getting people to understand when gamification is going to help you and when it is not. So when you have difficult badly designed interface adding gamification is not going to help. Mario likes to say "chocolate covered broccoli". At the end of the day it's still going to be broccoli, you're not going to hide anything. If it's ugly and badly designed but you just can't get people to use it then gamification might be the solution. But underlying that you have to be willing to acknowledge that if you have a badly designed system no amount of gamification is going to improve that.

**Fiona:** That is a reoccurring themes that keeps coming up is the need to explain this is how it is connected to the business issue and this is what it can solve otherwise it gets lost in translation altogether.

**Ericka:** Exactly, I'm actually working on a set of guidelines for the use of gamification for us internally and also to give to our customers and the one thing I say is that you have to establish what your business objective is, what are you trying to change and can you measure it naturally because if you can't measure it now well how do you know if gamifying it will do any good. So the first thing you have to do is figure out what are you trying to change in this system and how do you envision that gamification is going to help you with that. When you see people who say we want to add gamification because we've seen it in the marketplace you have to say "no you need gamification because you have a business case". If you feel you need to change something then you have a business goal and you can start to think about how do you do that and who your users are and what kind of mechanics you need or are appropriate. But just saying we want to add gamification for the sake of adding gamification will get you nowhere.

**Fiona:** It is so hard to get a definition of gamification because it is so many different things. There is not a standard way, to even explain to someone what it is, is difficult because it has so many different applications. It really depends on the circumstances.

**Erika:** Oh yeah, at the end of the end if I take someone who is in finance and sits quietly in a cube all day long and I start putting a leaders board on that, people will freak out because that is not the type of thing that they want to see, that is not the type of thing that is motivating for them. You realise if you take sales people they are highly competitive to begin with, they love to see how they are measuring up, they love to see they are succeeding so what they would be interested in would be completely different.

**Fiona:** One organisation I spoke to talked to me about his programmers who are not the most socially interactive of people and that the persona they have in the virtual world is very different than reality. So therefore they can learn more about the potential that person has in terms of their development and how they can be best used in the organisation which they would never have seen face to face.

**Ericka:** It really is one of those things that, well the first part of my guidelines is about making sure you have a business objective and the second thing is about really understands your user and figure out what they are motivated by. Our concept is you need to develop a user persona to figure out what would this user care about? Are they in an environment where they are competitive against others or are they in a collaborative environment? Is there work environment very structured and formal or is it informal and loose. Different things are going to appeal to different groups and different users and if you haven't considered who you are talking about you can do it very wrong and really turn people off.

I've seen some really bad examples of gamification. Microsoft at one point for example they have a developers network and they started to award badges and shiny object things to people whose code was considered to be really cleanly written and the amount of backlash just the announcement had was terrible. People were furious, basically people were saying you are taking my highly educated very skilled job and trivialising it.

Fiona: A sure way to disengage employees

**Ericka:** Yes, they clearly hadn't worked out who their users were and what they find relevant. They have since dropped it.

**Fiona:** I can see so much how this is going to grow and change. I am conscious of time so just to round up and finish up. Going back to the whole area of using this as competitive advantage but as I am talking to you I am actually seeing that in 5 years' time for example, looking at business cycles, this is not going to be about competitive advantage, this is actually going to be about necessity.

**Fiona:** But for the likes of us here in Ireland, it's still such a new concept and we are at the cusp of the wave and even if some of our US multinationals here are using it, they don't necessarily know they are using it as it has come from corporate.

Whatever way it looks in the future however you are of the belief that the concept is here to stay?

**Erika:** yes and I think what is really interesting is that I start to think everyone knows about this but I then have to think no a lot of people don't know what this is. A lot of people have heard the term but they don't know what it is so from their perspective it's just this really vague loose idea and that's where the term gets us in to trouble. When you have someone who doesn't really know anything about it and they hear the term they are likely to say this is not something I need to know about as it is not something I am going to care about.

**Fiona:** Equally I find also that the link between the way you are using it and what the stats, revenues, cost savings that its bringing to the business, that the piece that I feel is missing also.

Erika: Yes definitely, defiantly

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