



[global research]

The hottest new direction in talent management?

Or just another distracting fad?

MANAGEMENT

THE TALENT MANAGEMENT GAMIFICATION 9-BOX

PageUp assesses the performance and potential of gamification in the context of organisational talent management.

© 2014 PageUp





Table of Contents

Executive Summary.....	3
Enterprise Gamification: The Verdict.....	5
[1] Why Gamify?.....	6
[2] Players.....	9
[3] Applications.....	11
[4] Science.....	15
[5] Return on Investment.....	18
[6] Efficacy.....	20
[7] Design.....	22
[8] Community.....	23
[9] Innovation.....	24
A Call to Action.....	25



In this White Paper, we look at the who, what, where, why and how of gamification. We assess the performance and potential of gamification in the context of organisational talent management.

- Does gamification of organisational processes actually improve results?
- What sorts of results does it improve?
- What do enterprise 'players' aim to achieve from gamification?

- What applications will best lend themselves to being gamified?
- How can user engagement be optimised?
- What is the future potential of applied gamification in talent management?

[commercial-in-confidence]

GAMIFICATION 9-BOX



The Talent Management Gamification 9-Box

1. WHY GAMIFY?

Workplace performance and productivity are critical business issues, yet poor levels of employee engagement in workplaces everywhere highlight the need to explore new avenues to reconnect employees.

2. PLAYERS

Enterprise gamification is already big business and on a steep growth trajectory. Dozens of vendors are servicing hundreds of enterprises looking to better connect their people to their talent management processes.

3. APPLICATIONS

Gamified apps are transforming how enterprises attract, recruit, train and develop employees. Increasingly, gamified apps are being enlisted to support behaviour change, increase innovation and employee wellbeing.

4. SCIENCE

Neuroscience is providing biological data and evidence for what drives human behaviour. By their nature, games tap into many of our most potent and compelling drivers, which is why games work.

5. ROI

With billions of dollars invested in people processes and technology each year, enterprises are anxious to see results. Gamification yields quantifiable ROI through increased participation and performance.

6. EFFICACY

Do games at work actually work? Numerous empirical studies that are asking the question are getting a resounding answer: yes. Still, there is some way to go to unleash the real potential of enterprise gamification.

7. DESIGN

With the devil in the detail, most organisations embarking on gamification will get it wrong before they get it right. Much can be learnt from mistakes already made.

8. COMMUNITY

Games build natural communities of players and elicit voluntary participation. Advanced social, mobile and analytics technologies unleash the real power and potential of enterprise gamification.

9. INNOVATION

Gamification presents new avenues for sourcing and harnessing creativity and innovation. Crowdsourcing is aligning with gamification to challenge current thinking and innovate what and how workers make workplace contributions.

The verdict comes from an assessment of 9 talent management gamification factors to determine whether gamification stands up to serious scrutiny, or not.

“Gamification is the use of game design techniques, styles and mechanics in non-game contexts and activities, with the objective of engaging users, solving problems and driving desired behaviors that help a company reach a business goal.”

—Cognizant

Enterprise Gamification: The Verdict

Performance Rating - 2.5 Stars

This rating reflects good preliminary results from the performance of gamified talent management systems but recognises that:

- usage is still in a minority of enterprises
- applications tend to be 'lite' in design
- implementation may be limited or inconsistent

PERFORMANCE RATING



Potential Rating - 5 Stars

This rating reflects the enormous potential of gamification to both disrupt and transform talent management practices and recognises that

- the enterprise market remains largely untapped and is destined for growth
- shifting workplace mindsets and expectations favour a trend toward gamification
- social and mobile technologies are emerging as the enterprise tools of choice in the battle for increased employee engagement.

POTENTIAL RATING



“Gamification is the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals.”

—Gartner



[1] Why Gamify?

It's bad and seemingly getting worse. Around the world, the figures vary but the message is the same – levels of employee engagement are poor and the cost in lost productivity and revenue is enormous. The annual Gallup survey¹ surmises that globally, only 13% of employees are engaged, 63% are not engaged and 24% are actively disengaged.

Born to Play

Serious or silly, human beings (and for that matter, most mammals) love to play. Why? Beyond merely filling time, games are essential to our mental and physical development and contribute enormously to how we:

- *test theories and assumptions*
- *build social networks*
- *collaborate to achieve an outcome*
- *spark our imaginations*
- *develop competence and learn*

Not to mention, they are usually fun. In childhood, games are an accepted and encouraged method of learning and interaction and despite being less associated with adult pursuits, the fundamentals behind why we love games remain throughout life.

The 21st Century Problem: Employee Engagement

If you are sitting in a meeting right now with 8 of your colleagues, chances are only 1 actually wants to be there, 5 are open to alternative employment suggestions and 2 either have job interviews already, or worse still, are disengaged and don't.

With only 37% of organisations actually able to point to a clearly defined employee engagement strategy and a mere 15% applying theirs across all levels, focus and action on this critical business issue remains underwhelming.² Yet, as HR and business leaders everywhere struggle with how to connect with their workforce, one wild card shows promise of cutting through the workplace lethargy.

And it is a card we all know quite well.

Games.

Motivation in action

Games activate our motivational systems on two levels.

Intrinsic motivators are those that trigger our desire to attain internal satisfaction. Intrinsic factors are tightly aligned to our self-identity and reflect the extent to which we pursue personal and professional power, autonomy over our circumstances and

mastery over our endeavours. Intrinsic motivation also aligns with our need for group identity, purpose and meaning and simply the opportunity to experience joy and happiness.

Extrinsic motivation relates to our drive to seek external rewards and avoid punishment. In the games industry, common examples of such rewards and recognition are the accumulation of points and badges and progressing through increasing levels of challenge and your ranking on hierarchical leader boards.



CITO research concludes “gamification works because it addresses the motivations and desires in all of us, including the need for community, for feedback, for achievement, and for rewards”.³

Consumer Games

From ball games to board games, card games to conquests, there appears to be no limit to our creativity in the invention of games and passion for playing them. Technology has led to an unprecedented explosion of games, tapping the social networking infrastructure and putting games in the hands of players on Cloud-enabled devices, anywhere, anytime.

Been to an App Store lately? The top 10 free, paid and top grossing apps are dominated by...games.

75% of the top 100 apps are games. In 2012 the total market for games was US\$242 million, up 150% on 2011. Of this, 68% represented consumer games, 32% enterprise. Continued growth forecasts are exponential – market size is projected to be US\$2.8 billion by 2016 and to almost double again to US\$5 billion by 2018.⁴

Players of consumer games of course number in the millions, but their demographics may be slightly counter-intuitive. The stereotypical gamer is an under-active, overweight, geeky teenage male. As it happens, the average age of game players is

37, with 25% of players aged over 50. And 42% of gamers are women, increasing to over 50% when reviewing social versus competitive games.⁵

We are now in an era characterised by technology-fluent millenials who grew up with X-boxes, PlayStations and Wii's. Their brains developed mastery over computer games and this domain is not only familiar to them, but necessary.

Enterprise Gamification

Increasingly, the business world is looking to enterprise games to elicit in its customers and employees the same addictive attraction that consumer games have on individuals.

The gamification of enterprise processes and activities has been defined by Cognizant⁶ as, *the use of game design techniques, styles and mechanics in non-game contexts and activities, with the objective of engaging users, solving problems and driving desired behaviors that help a company reach a business goal*. Gartner⁷ more simply defines gamification as, *the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals*.

Accenture⁸ draws a distinction between *serious games* and *gamification*. Serious games simulate real work environments and may retain elements of entertainment. Gamification refers to the use of selective game elements added into work processes to make them more engaging.

Whichever your preferred definition, enterprise applications of gamification vary considerably, but share a common underlying driver: to improve participation and engagement. Games reach outward to engage customers and inwards to engage employees. Enterprises are looking to gamification to:

- increase sales
- minimise costs
- boost customer loyalty
- elevate employee engagement
- drive collaboration
- stimulate innovation.

Engaging employees with a view to increasing commitment, retention, discretionary effort and innovation has become big business and a crucial focal point for HR. Yet despite the focus, engagement levels continue to be lacklustre in most organisations. Of growing importance in the weapons arsenal against disengaged employees is gamification.



[2] Players

If you are thinking enterprise gamification is a fringe activity pursued by a few geeky organisations to little effect, think again.

Across industries from retail, manufacturing, mining, financial services and IT, as well as the public sector, organisations are asking the question: how can gamification support our strategy execution, externally with our customers and internally with our employees?

Vendors

Dozens of enterprise gamification solution vendors have spawned in the past few years developing stand alone and integrated gamified platforms with enterprise customers and/or employees in mind. This can make vendor partner selection a challenging game itself.

Organisations can tap into out-of-the-box gamified solutions from established vendors or custom build. As always, pros and cons for each approach exist, including internal versus external development capabilities, timeframes to implement, vendor stability and configurability and integration options, to name a few.⁹

Enterprises

Literally hundreds of organisations have already taken the plunge and are either testing the waters and trialling modest forays into gamification or are already converts and completely committed to its current and potential benefits.

A groundswell of activity led by passionate thought leaders, gaming evangelists, technical designers and organisational change agents is gaining traction. Early successes and associated learnings are promising and it is unlikely that gamification will go away. Still in its infancy though, gamification will very likely experience a steep evolution as vested enterprise players continue to push the boundaries.

Employees

What about the people actually engaging with these gamified enterprise technologies – the employees? Organisations embarking on gamification must address the fundamental question of “who is the target audience for these applications?” The challenge is in the answer: many and varied employees from multiple generations, cultures and backgrounds.

That means one size will not fit all and the game concepts and mechanics will need to appeal to a diverse demographic of players.

Gamified Enterprises

Accenture
Adobe
ASIC
Deloitte
Facebook
Ford
GE
Marriott
Microsoft
Mitsubishi
Nike
Oakley
Phillips
Quixey
Rolls Royce
Samsung
Siemens
Sony
Spotify
Symantec
T-Mobile
Tiffany & Co
ToysRUs
U.S. Army

Generational differences in workplace motivators have been extensively researched and point to some distinctive variations in motivational triggers.¹⁰

Generation	Builders	Boomers	Busters	Bridgers
Born	1922 - 1942	1942 - 1962	1962 - 1982	1982 - 2002
Work Motivation	Acknowledgement of Expertise	Symbols of Achievement & Promotions	Professional Development & Flexibility	Flexibility & Growth

As we will see in section [4] Science, rewarding human behaviour is multi-dimensional – ***what excites and satisfies one employee may seem trite and trivial to another***. If they are to achieve their aim of engaging employee interaction, enterprise games require reward structures that cater to more than one player profile. Further, there may be numerous overlaps and individual differences both within and across the generations. For example, a Bridger may seek symbols of achievement and promotions, as do the Boomers.

Another way may be to develop player profiles based on individual playing types rather than age groups. For example, gamer profiles such as Achievers, Explorers, Socializers and Killers have been developed to describe four common player personas.¹¹

Achievers	Explorers	Socializers	Killers
Love recognition by winning badges or advancing through game levels.	Seek new content, novelty and challenge.	Thrive on connecting with friends or other players.	Like to impose their will on others and vanquish an enemy.

This form of categorisation centres on the reward factors that register with different types of players, irrespective of their age, gender or background. Organisations embarking on gamified applications need to understand their end user profiles to determine approaches that achieve engagement of such diverse audiences.



[3] Applications

Having identified some of the players, the next question is, what games are they playing?

In the organisational talent management arena, you would expect that games are being put to work to either enhance the productive outputs of employees, or build their capability to do so. Turns out, that's exactly what talent management games target.

We found evidence of gamified processes across a broad range of talent management applications, including:

- sourcing and acquisition
- increasing performance
- training and development
- innovation and behavioural change, and
- increasing wellbeing.

Sourcing and acquisition

A compelling employment value proposition (EVP) is an essential accessory for any organisation seriously competing for top talent in today's market. Not only does it communicate the WIIFM (what's-in-it-for-me) to potential candidates, but also presents the organisation's persona through the values and purpose behind its existence.

Finding and attracting the right talent is a multi-million dollar industry. It chews up a disproportionate amount of time, money and effort in most organisations and is especially challenging in high growth markets and high turnover industries. Being so resource intensive, recruitment is a natural target for process improvement. Enter gamification.

Recruitment and gamification are a natural fit because both share a very critical feature: the assessment of talent. Not surprisingly, some of the first applications of enterprise gamification appear in the area of talent acquisition.

- App search development company **Quixey**, uses a reality TV game to recruit software engineers.
- The **U.S. Army** developed American Army to attract would-be recruits by allowing them to experience army life in an interactive online game.
- At **Domino's Pizza**, a game requiring candidates to design pizzas, Pizza Hero, forms part of the selection process.
- Programming community site **TopCoder** uses gaming to identify and assess the best programmers for contract and permanent work.

GAMIFICATION 9-BOX



CASE STUDY: Talent scouting with REVEAL, by L'Oreal

Transforming the way employers attract and recruit great talent is global cosmetics giant, L'Oreal. Their interactive gamified REVEAL platform invites players (effectively job candidates) to test their knowledge and skills and reveal their strengths and career opportunities by working in one of L'Oreal's operating divisions and taking a new product from inception to market.

Over 4 hours, players learn about L'Oreal's business, global structure, meet team members and work on a new product. All along the way players are assessed and receive feedback and rewards. Finally they receive the output of their assessment, a profile to assist them make job and career choices based on their interests and strengths.

Behind the scenes, the game alerts L'Oreal's talent scouts (recruiters) to skilled players that can then be invited to apply for available roles.

Check it out at: <http://www.reveal-thegame.com>

Recruitment and gamification are a natural fit because both share a very critical feature: the assessment of talent.



[Contact](#) [Terms](#) [Help](#) [Careers](#) [Logout](#)

[Follow us on Facebook](#)

[Like](#)

6,316 people like this.
Sign Up to see what
your friends like.

Increasing Performance

You're an Outbound Caller at a major call centre with a target of 80 calls per day and expected conversion rate of 8%. Managing the stress of high rejection rates, abusive prospects and demanding schedules, could there be a better time or place to play a game? Call centres present a natural forum for competition and collaboration. This industry has been using competitions, leaders boards and awards for decades and games are popular circuit breakers and performance enhancers.

- **LevelEleven** a sales motivation engine, developed Contest Builder to allow sales managers to gamify any of the sales metrics in [SalesForce.com](https://www.salesforce.com)
- **IBM** built Smart Play to accelerate competency development and workforce performance. Smart Play is a serious game platform that integrates social learning with work simulations and performance dashboards

Performance feedback and performance reviews, the bane of employers and employees alike, have also been the target of creative gamifiers.

- **Work.com** uses gamified mobile apps to provide instant feedback to team members, replacing the top-down formal event with a 360 multi-rater real time process
- **LivingSocial**, **Spotify** and **Facebook** have all discarded annual performance reviews in favour of gamified apps that are both fun and constructive.

Training and Development

According to Bersin by Deloitte, traditional employee training is a \$13 billion market. Yet **71% of organisations claim themselves to be 'weak' in the application of advanced media, such as video, gaming and simulations**. 23% say they are 'adequate' and only 6% believe they are 'excellent'.¹²

Some examples of 'excellent' gamification execution in training and development include:

- **Marriott** developed My Marriott Hotel, a game that allows players to explore and experience various roles in a hotel
- **Siemens** developed Plantville, a game used to train plant operators
- **GE** created Patient Shuffle, a game that teaches players how hospitals work
- **Sun Microsystems** built an adventure game to fast-track the on-boarding of new employees
- **Khan Academy** uses games as an educational resource for knowledge acquisition and retention
- **Deloitte** uses gamification in the Deloitte Leadership Academy to accelerate learning and increase participant return rates

CASE STUDY: Getting On Board with Telstra

Happy, competent employees lead to happy, satisfied customers and telecommunications leader Telstra Corporation is onto it. In their drive to become ‘famous’ for customer service, Telstra has gamified its onboarding platform for new recruits. With the challenge of accelerating speed to competency, the Telstra onboarding portal takes new employees through a series of episodes in a game to develop their knowledge and skills.

As each episode is unlocked, players receive points. Points accrue on an open leaderboard that ranks all new starters by their rate of episode completion. Engagement with the game has resulted in fast-tracking the productivity of new recruits and instilling a real culture of customer service. And they’re having fun!

Behaviour change

Games can also do more than add zest to otherwise dry or technical training content. One organisation identified there would be considerable change management challenges associated with their proposed move from Lotus Notes to Microsoft Exchange. In a novel approach to the introduction of this new technology, they used a game to ease users into Exchange, with rewards at progressive levels as additional functional features were adopted.

Wellbeing

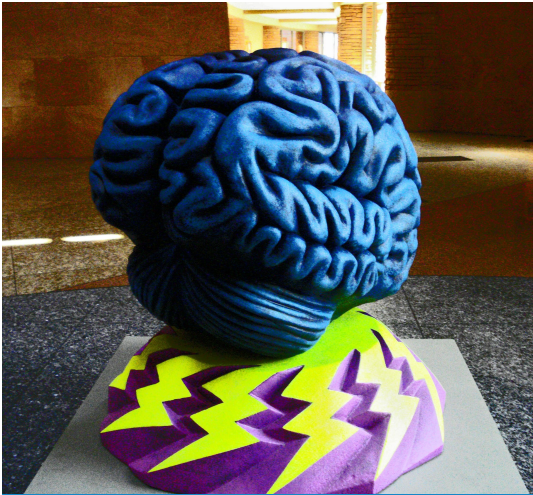
Employers are increasingly building wellbeing and work/life balance programs into their mix of employee benefits. These too can lend themselves to gamification.

Healthy employees are happier and more productive so it is clearly in an employer’s interests to promote wellbeing. Towers Watson found that initiatives to improve employee health and wellbeing continue to increase, with **40% of US companies actively promoting wellbeing strategies**. Technology-enabled platforms, including social networking, forums, blogs, online discussion groups and games are key strategic elements to delivering these workplace programs.¹³

Innovative employee rewards and compensation company, NextJump, is renowned for a gamified app that promotes employee fitness and has resulted in improved cognition and reduced absenteeism. Nike developed Nike+, a collection of apps and accessories athletes to track workouts and encourage fitness activities.

CASE STUDY: At War in Axiata

Accelerating the development of current and future leaders is top of the agenda at Axiata. As a leading regional telco in Asia with operations spanning Malaysia, Indonesia, Cambodia, Sri Lanka and Bangladesh, Axiata recognizes the urgency to develop and retain its leadership talent. Raising the bar on leadership development programs, Axiata is now in its fourth year of running the leadership War Game in which middle and senior managers from across the region participate. Simulating futuristic business scenarios, teams go to battle competing in dynamic and evolving business challenges designed to stretch and test their skills. Driven by a powerful simulation engine and linked to an internal social networking platform, the War Game presents real-time business issues and promotes self-awareness and personal and professional insights. The technology platform enables participants to broadcast information to support their strategies and provides immediate feedback from observers and peers. Many veterans of Axiata’s War Game have gone on to senior and executive leadership positions in the company’s network.



[4] Science

If gamifying serious corporate processes in the quest to raise engagement levels still sounds dubious to you, perhaps it's worth understanding how games work on the human psyche – and yes, there is some sound science to that.

Neuroscience, to be specific.

It's Thrilling

Apparently we like a little risk. Neuroscience studies support that game players prefer games that are not solely skill-based, rather that involve some element of chance.¹⁴ In fact the highest level of dopamine release is achieved at a 50% level of chance.¹⁵

*Further, research into the association between dopamine and reward shows that the biggest spike in dopamine release occurs, not when we receive a reward, but in anticipation of one. **It is the possibility of reward that drives behaviour toward it.** In effect, we experience satisfaction when we achieve a goal, but we are motivated by being in pursuit.*

The cocktail party in your head

No doubt by now you will have heard that your brain houses billions of cells, or neurons, with trillions of connections between them. It's a frenetic scene of electro-chemical activity in which individual neurons are activated and deactivated by their neighbours and form the neural networks that process and store everything we know and feel about ourselves, others and our world. Dozens of neurochemicals are involved in the transmission of data between cells and their differing attributes shape a distinct response.

The rock star of this chemical cocktail party is dopamine. Sometimes referred to as the 'happy' chemical, dopamine plays an integral role in human motivation. A release of dopamine is triggered when we are positively stimulated – by a smile, praise, winning, novelty, personal recognition – basically, any form of reward. Conversely, inadequate dopamine levels are associated with negative mood states, anxiety and depression.

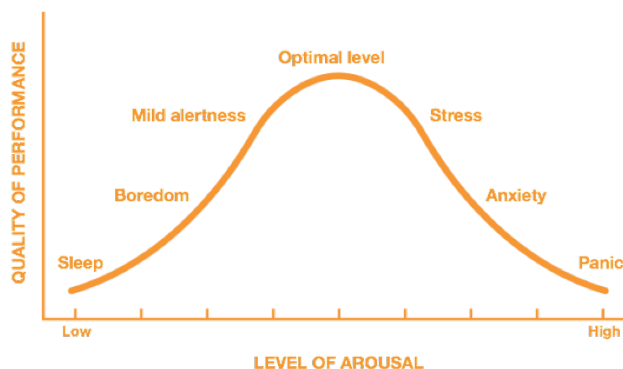
Dopamine is also highly addictive. The 'feel good' response it elicits motivates us to pursue more. In the world of games, winning a prize, receiving a badge, accumulating points and climbing through levels, all produce a dopamine hit that keeps us coming back for more. But more than merely creating a positive mood state, dopamine enhances memory encoding and recall, making it a necessary element for learning.

It's Sensational

A feature of most digital games is their combination of multiple sensory elements. They can be bright, colourful and often animated. Most have sounds, voices and/or music and require the player's physical interaction through keyboard or touch-screen actions. This visual, auditory and tactile combination activates multiple brain regions and thousands of neural circuits to process information and respond. More neural activation means more mental stimulation, more engagement and ultimately, more learning.

Research also points to the importance of facial expressions to human perception and emotional empathy. Games with characters (real, cartoon or avatars) that express human facial movements and emotions trigger the emotional brain centres and draw players deeper into the game.

Moreover, research has long held that humans require some level of stress to function optimally. The Yerke-Dodson Optimal Arousal Curve shows how variations in human stress levels impact performance. At the extremely high and low ends of the arousal scale, performance is impaired. However, with a moderate level of stress, we are in our optimal performance zone. Games induce a mild positive stress, shifting players into this zone.



It's Safe

The fact that we 'play' games has us perceive them as inherently safer than testing ourselves in the real world. In games, characters and players make mistakes, lose and even get killed – but we can easily restart the game and continue unharmed.

With this mindset, we are more likely to take risks and much larger risks. We are also more likely to innovate with creative alternatives.

It's 'brain-friendly'

Social cognitive neuroscience focuses on the brain mechanisms that underpin effective interpersonal relationships. The extent to which environmental conditions create a perceived threat or reward alter how the brain processes the information, including which neuro-chemicals are released and how these shape our response.

Games score well on five factors that impact human behaviour:

1. Collaboration

Many games facilitate or even require collaboration. Social interaction is a primary human driver and we have extensive neural networks dedicated to connecting and relating to others. The social aspect of games increases participation and supports continuous engagement.

2. Status

The competitive elements built into most games create opportunities for challenge and recognition. Some games are simply won or lost, but many designs have progressive components that draw players back, such as competitive rankings with leader boards and public recognition with points, badges, progress bars and virtual currencies. Our comparative status is a crucial dimension of self-esteem and personal identity.

3. Novelty

In our stimulant-rich world, gaining and holding attention is a significant challenge. Dry learning content, corporate messaging and boring technical material are all hard work for our novelty-seeking, curious, monkey-minded brains. It's hard to digest and encode traditional training content into memory, which consequently compromises recall. Getting and holding attention through lively, animated, challenging and chancy games cuts through the volume and sparks extensive brain circuitry that leaves a much deeper imprint and enhances learning.

4. Certainty

We are entertained by novelty when it is presented in the context of sound principles that give us some certainty. Certainty and novelty are therefore not incongruous to our brains – they are interdependent. A complete lack of certainty can be highly stressful – it induces a threat state and triggers a fight/flight/freeze response. But certainty without novelty quickly becomes dull and boring. In games, certainty comes in the form of the structures that underpin the game. This includes having game rules, rewards and a balance of skill-based activities and chance elements. It also includes the provision of continuous and real-time feedback.

5. Equity

Most players will quickly abandon games perceived as unfair or biased. Players pitching themselves against others expect equitable benchmarks and objective feedback. Games are an open meritocracy – the rules are the rules and everyone plays by them. No favourites, no biases.

It makes learning stick

Neuroscientists such as New York University's Lila Davachi study effective brain functioning and in particular, learning. Davachi's work¹⁶ is challenging long-entrenched methods of workplace learning and development which have traditionally been

class-room based, content-heavy and delivered in concentrated blocks. Her **research highlights the importance of engaged attention, self-generated ideas and thinking, emotional connection and adequate processing and reinforcement time to make new learning stick.**¹⁷

Direct studies into the cognitive effects of gamification also attest to the correlation between engaging in gamified applications and many of the dimensions of the *flow state*, namely triggering an autotelic experience, having clear goals, receiving immediate feedback and balancing the game's challenge with the player's skills.¹⁸

Learning system providers are increasingly putting the research into action. While many game developers naturally build elements such as visual appeal, sound, motion, feedback and progress evaluation into their designs, companies such as Axonify have taken direct findings from neuroscience one step further. For example, the principles of spacing learning content in small chunks over time with regular repetition underpin the interval reinforcement process embedded in the Axonify learning platform.¹⁹ This directly addresses one of the biggest criticisms of traditional training methods, poor knowledge retention.

Since inception, Axonify has focused on sustainable learning through technology-based solutions built on brain science principles. Serving blue-chip corporates such as WalMart, PepBoys, ToysRUs and Johnson & Johnson, Axonify prides itself on showing demonstrable return on training and development investment through its gamified online programs. Axonify achieves these business results for their clients by leveraging the perfect combination of science, technology and fun.
www.axonify.com



[5] Return On Investment

Do the numbers stack up?

Is there a demonstrable return on gamification investment?

From “recruitment” to innovation, change management, policy compliance and sales training, many organisations are investing in gamification with a view to achieving quantifiable results²⁰ and attest to the quantifiable benefits of gamification:²¹

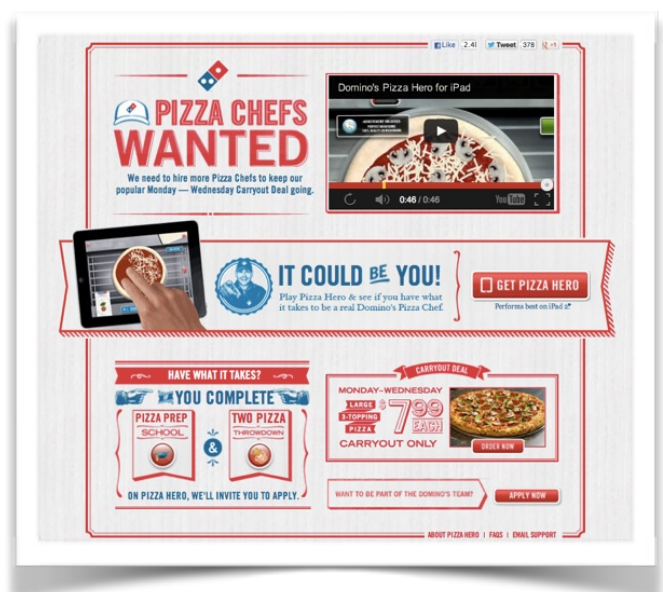
Increased Participation

- Deloitte Leadership Academy increased participant engagement through gamification leading to a **46.6%** increase in daily return rates
- Onmicare achieved **100%** participation from team members following the introduction of gamification to its IT Service Desk
- Astra Zeneca achieved **97%** agent participation after gamifying its medicine training, with a **99%** completion rate
- Pharmaceutical company Galderma achieved **92%** participation by gamifying new product training.

Organisations are investing in gamification with a view to achieving quantifiable results.

Improved Performance

- LivingSocial and Spotify have **90%** of employees voluntarily engaging in performance feedback since the replacement of annual reviews with a gamified app
- CaLLogix reduced employee turnover by **50%** and absenteeism by **88%** with the introduction of enterprise games
- Google have achieved nearly **100%** compliance since their employee expense management system was gamified
- Domino's Pizza increased sales by **30%** by enabling customers to design their own pizzas using the gamified Pizza Hero app.



Improved Learning

- Formaposte, the training center for the French postal service, gamified a day-in-the-life job simulation to reduce drop-out rates for new trainees from **25%** to **8%**
- LiveOps call center used its MyWorks gamified community app to reduce new agent onboarding time from **4 weeks** to **14 hours**.

Increased Innovation & Wellbeing

- **67%** of NextJump employees attend gym sessions since a gamification app was introduced
- Aetna achieved an increase in daily health activities of its employees by **50%** with averaging 14 minutes per employee
- Nike engaged over **5 million** users with gamified feedback to beat their daily fitness goals for a year.

By many measures, gamification is producing impressive and quantifiable results. In the majority of cases, the impact is not just incremental, but exponential.



Nike engaged over **5 million** users with gamified feedback to beat their daily fitness goals for a year.

[6] Efficacy

Earlier we saw the forecast gamification industry growth figures. So the \$5 billion dollar question is “does gamifying enterprise processes actually work?”

Intuitively, the answer should be yes. If games challenge and engage, and challenge and engagement are key to participation and learning, it should be a clear case for the affirmative. Then why does Gartner position gamification at the Peak of Inflated Expectations²² – where-after the Trough of Disillusionment awaits?

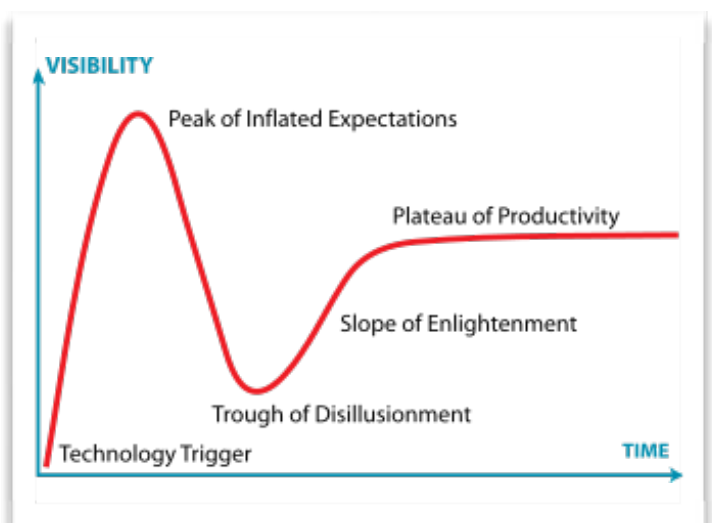
In a recent meta-analysis²³ of 95 empirical studies into persuasive technologies - including games – researchers sought to determine whether these technologies were effective in the formation, alteration or reinforcement of behavioural outcomes. The review concluded that the impact of persuasive technologies on behavioural change were:

- 54.7% positive
- 37.9% partially positive, and
- 7.4% negative.

While you couldn't call it a 'slam-dunk' for proponents of gamification, it's certainly trending in the right direction (remembering also the analysis was restricted to only empirical studies). Other studies validate the efficacy of gamification, but caution the importance of context (for example learning, health or work tasks) and the possible limitations of competitive designs.²⁴

What it does suggest is that gamifiers are certainly onto something and future enterprise game development needs to tighten game design to align with the desired outcomes.

Back to Gartner's Hype Cycle. It's probably fair to say that expectations of gamification are over-inflated – after all, turning around employee engagement and customer loyalty are not minor challenges. In the enterprise world in fact, challenges don't get much bigger. Engagement is at the heart of the problem and gamification is only the latest in a series of brave soldiers to step forward and fight the battle to restore it. What is refreshing about gamification and gives us new hope for a solution, is its raw connection with core human drivers. Maybe, the answer is simpler than we have thought and just comes down to humanising the workplace.



Demographic Differences

Invariably, in any discussion about games and gamified processes, the focus will at some point come to the demographics of their target market. **A common misconception is that games are predominantly the domain of the millennial generation.** Whilst younger generations are certainly known to have a natural predisposition towards technology given its ubiquity in their upbringing, the older demographic are also highly connected game-players.

One study²⁵ into the differences demographics make to the perceived benefits of gamification found that

- age is not a significant factor in user engagement (although ease of use does decline with age)
- women report more social benefits from playing games than men, and,
- novelty is a significant factor (perceived enjoyment and usefulness decline with continued use).

While enterprise game developers must absolutely understand and design for their target audience, approaches based on demographic assumptions and other stereotypes may be more of a hindrance than a help.



[7] Design

Gartner estimates that **80% of gamified applications will fail to meet business objectives due to poor design**.²⁶ To avoid becoming part of the statistic, game design must come second. What comes first is the need for a clear strategy that integrates gamification with the enterprises goals, culture and systems. There is more to a successful gamification strategy and its implementation than meets the eye.

We can be thankful to the early adopters of enterprise gamification for blazing the game development trail. As is always the case in emerging fields, there are immense 'first-in' opportunities, but in gaining them, many mistakes will be made and lessons learned.

Here are some of lessons from our gamification pioneers.

DO NOT

- Fail to link gamification strategy with overall business goals
- Confuse gamification with games that simply entertain or reward
- Fail to build design drivers that sustain user interest
- Become mesmerized with superficial game mechanics (such as points, badges & leader boards) at the expense of meaningful design elements like collaboration and competition
- Take a one-size-fits-all approach to reward frameworks that only motivate some users
- Skimp on feedback mechanisms (which need to be continual, well-timed and balanced to work)
- Forget to build in meaningful analytics that can track engagement, outcomes and ROI.

Similarly, some lessons highlight game design and implementation successes:

DO

- Carefully craft games with opportunities to increase engagement
- Maximise interactivity between the game and players to increase learning
- Embed the game into a learning curriculum
- Include time for game set-up, play time and debriefs
- Use meaningful stories that relate to the desired outcomes
- Introduce characters with emotions to involve players
- Use characters to provide player feedback and instruction to learners.

The magic formula for enterprise gamification design success appears to be a combination that balances clever, fun game mechanics with relevance, curiosity and direct workplace outcomes, such as getting a new job, learning a new skill or receiving performance guidance or feedback. Not to be underestimated is the importance of personalising the experience for the user and harnessing the metrics for the organisation.

[8] Community

So Social

With a few possible exceptions, games are almost universally social. The attraction to them is not just about winning, but

- being seen to win
- being recognised as a winner, and,
- being rewarded for winning.

Games tap the deeply entrenched social fabric of our human DNA. As it happens, gamification is growing just as technology-enabled social networks are maturing and employees have learnt the basics of collaborating online. The power of enterprise games comes both from individual accomplishment and from shared goals and achievements – all visible through an organisation's social network infrastructure.

Enterprise gamification has been shown to significantly increase both collaboration and competition within organisations. In one study²⁷ of an organisation's social networking system, gamified mechanics (badges, points and leader boards) were removed after a trial period and the resulting impacting measured. Contributions to the social networking site, in the form of comments and posted photos and ideas, dropped by as much as 50% after these extrinsic game rewards were removed.

Must Have Mobile

It's hard to talk about any social networking today without touching on mobile access to it. Social and mobile are the yin and yang of technology.

Just as much of the power of gamified apps relies on links to social networking infrastructure to draw players into the game, access via mobile devices ensures they keep playing – anytime, anywhere.

Talent management gamification happens to be especially conducive to mobile applications. Consider applying for a job or completing a learning module – activities that lend themselves to flexible environments and can be completed on-the-go. In one study, **71% of participants said they were open to use a mobile learning application but only 13% had current access via their smartphone.**²⁸



Gamification Inspires Volunteering

We engage in games as volunteers. The charm of volunteering lies in the personal power every individual has to exercise it. Volunteers offer discretionary effort for little or no monetary reward. The key to harnessing discretionary effort is not to demand or require it, but to create conditions where employees want to volunteer it. Voluntary adoption of gamified enterprise applications increases communication, collaboration and innovation and promotes the sharing of knowledge and expertise throughout the social network.²⁹

Gamification effectively activates communities and allows for shared experiences and learning in an engaged environment.

[9] Innovation

Perhaps in time we will look back and see the enterprise goal of increasing employee engagement through gamification as a very elementary stage 1 in its evolution. After all, that's merely getting people to sit at the table, follow the game rules and stay there, for a while. A loftier and very foreseeable goal is to use the power of games to channel real creativity and play an entirely different game.

Gartner estimates that by 2015 more than 50% of organisations that manage innovation processes will gamify these processes.³⁰ Innovation can take the form of breakthrough thinking and fresh ideas as well as new and creative ways of getting things done.

Crowdsourcing Meets Gamification

What if you could harness the creative problem solving skills of thousands of people around the world by involving them in a game?

Take Wikistrat, a gamified crowdsourcing engine that collects the intelligence of hundreds of analysts, consultants, academics and journalists to prepare forecast reports for companies and industries that were once the protected domain of global consulting firms. Although contributors are paid, a significant incentive comes from rankings achieved in the game, attracting some of the best minds in the world.³¹

What if you could assemble a volunteer workforce to gift you their time to complete a mammoth task in less time and better quality than a computer could do it?

Look to Finland, where the Finnish National Archives successfully enlisted 55,000 players in a game that digitised their entire database of records.³² Distributed human intelligence – the collective brainpower of talented individuals around the world – is all the buzz. Being able to channel it toward achieving meaningful outcomes is crowdsourcing. Add to the recipe a game and you have a powerful mechanism for achieving extraordinary goals.

Gamification has even been used to improve the quality of crowdsourced contributions to scientific research by reducing or removing direct financial rewards in favour of tapping entertainment-seeking motivations through game based rewards.³³

By disrupting the norm and transporting players to fictitious virtual scenarios, games can also stimulate creative thinking. PwC cites the increasing popularity of using games to facilitate innovation as a growing trend in enterprises around the world.³⁴

The point is that people love to innovate, improve, create and challenge and games elicit these activities voluntarily – for the fun of it, the thrill of it and the satisfaction of it.

Just build the game and get out of the way.

A Call to Action

In *The Gamification Revolution* authors Gabe Zichermann and Joselin Linder draw a pertinent analogy for enterprise gamification.³⁵

“Think about gamifying...as the icing on a cake. If the underlying cake is tasteless...no amount of frosting will fix the problem.”

A reminder that, like all technology solutions, gamification is an enabler, not an end in itself. Gamification may, however, have transformational capabilities that other technologies fail to achieve, due to its seductive power to draw in the human mind and generate a hitherto untapped level of engagement in workplace processes.

To return to our opening questions:

Does gamification of organisational processes actually improve results?

Yes. Both on efficacy and return on investment criteria, gamification has shown measurable results, some extremely impressive.

Caution:

- For many installations, gamified platforms are still very new. The challenge of maintaining quantifiable results over time remains unproven and is subject to potential declines in usage and effect as the initial novelty wanes.

What sorts of results does it improve?

Numerous examples of return on investment have been cited in this paper. From quantifiable measures such as lowering recruitment costs, absenteeism and turnover to qualitative results such as reduced error rates, accelerated knowledge acquisition and improved performance feedback, gamification can make a significant impact.

Caution:

- Metrics and analytics capabilities are a necessary part of game design and strategy and must feature early in the development of gamified apps to achieve these outcomes.

What do enterprise 'players' aim to achieve from gamification?

Today, the goal is predominantly customer loyalty and employee engagement. The methods for achieving these goals are still in the early stages of maturity and very often centre on extrinsic rewards. There is considerable scope for the expansion of gamification into broader enterprise applications and also for tapping the deeper intrinsic rewards available through such play.

What applications will best lend themselves to being gamified?

In talent management, gamification has successfully been implemented to support onboarding of new employees, compliance training, idea generation and contribution, performance feedback and some behavioural change initiatives.

Caution:

- Many applications are still basic in structure and content, for example, targeting simple training material only or using a generic reward programs that have limited appeal across the workforce.

How can user engagement be optimised?

The best results from gamified talent management applications are coming from those that incorporate both extrinsic and intrinsic reward structures such that they are both fun and meaningful and are socially integrated.

What is the future potential of enterprise gamification?

What will the enterprise gamification landscape look like five years from now? With usage and business investment in gamification development destined for exponential growth, the possibilities for its application, if not endless, are immense.

Already, concepts such as replacing the much-maligned annual performance review with a gamification score, that objectively and accurately scores individual performance based on activities, achievements and progress in enterprise game systems, are up for discussion.³⁶

Enterprise gamification is still pioneer territory – where exactly it goes is a journey we are on and the destination remains a range of possibilities. Only one thing is certain: the gamification genie is out of the bottle and she is not going back in.

So, the game is on - are you in or out?

End Notes and References

1. Gallup (2013): State of the global workplace – Employee engagement insights for leaders worldwide.
2. Aberdeen (2013): The power of employee recognition.
3. CITO Research (2013): It's no game – Gamification is transforming the call center.
4. M2 Research (2012): Gamification in 2012 – Trends in consumer and enterprise markets.
5. Herger, M. (2013): Enterprise gamification – Engaging people by letting them have fun. (Presentation at the Gamification Conference, Munich).
6. Cognizant (2013): Boosting user engagement through gamification.
7. Gartner (2014): Redefine gamification to understand its opportunities and limitations.
8. Accenture (2013): Changing the human resources game – How “serious games” and “gamification” are disrupting human resources.
9. Infosys (2013): Enterprise gamification architecture strategy.
10. Ballone: Leading and motivating a multi-generational workforce.
11. Werbach & Hunter (2014): For the Win – How game thinking can revolutionize your business.
12. Bersin by Deloitte (2014): The corporate learning factbook.
13. Towers Watson (2012): Performance in an era of uncertainty - 17th Annual Towers Watson/National Business Group on Health Employer Survey on Purchasing Value in Health Care
14. Proceedings of the Academy of Educational Leadership (2012): Taking a chance – Introducing uncertainty into learning games.
15. Howard-Jones & Demetriou (2008): Uncertainty and engagement with learning games.
16. Davachi, Kiefer, Rock & Rock (2010): Learning that lasts through AGES.
17. Vorhauser-Smith (2012): The neuroscience of learning and developing – Crystalizing potential.
18. Hamari & Koivisto (2014). Measuring flow in gamification: Dispositional Flow Scale-2.
19. Axonify (2013): Interval reinforcement – improving employee knowledge retention to gain measurable business results.
20. Kumar & Herger (2013): Gamification at work: Designing engaging business software.
21. Chou, Y (2014): 90+ Gamification examples with ROI stats.
22. Gartner (2013): Emerging Technology Hype Cycle.
23. Hamari, Koivisto & Pakkanen (2014): Do persuasive technologies persuade? A review of empirical studies.
24. Hamari, Koivisto & Sarsa (2014): Does Gamification Work? — A literature review of empirical studies on gamification.
25. Koivisto & Hamari (2014): Demographic differences in perceived benefits from gamification.
26. Gartner (2012): Gamification – designing for player-centricity.
27. Thom, Millen & DiMicco (2012): Removing gamification from an enterprise SNS.
28. Enterprise Gamification Consultancy (2013): http://www.enterprise-gamification.com/index.php?option=com_content&view=article&id=147:research-paper-application-and-influence-of-gamification-in-mobile-learning-solutions&catid=4:blog&Itemid=251&lang=de
29. IBM (2014): Seven successful habits – How companies use social collaboration and gamification.
30. Gartner (2012): Gamification 2020 – What is the future of gamification?
31. FastCompany (2013): <http://www.fastcompany.com/3022299/why-this-company-is-crowdsourcing-gamifying-the-worlds-most-difficult-problems>
32. Crowdsourcing.org (2014): <http://www.crowdsourcing.org/editorial/how-gamification-drives-crowdsourcing/6419>
33. Eickhoff, Harris, de Vries & Srinivasan (2012): Quality through Flow and Immersion: Gamifying Crowdsourced Relevance Assessments.
34. PwC (2012): Enterprise gamification: Buzzword or business tool?
35. Zichermann & Linder (2013): The gamification revolution – How leaders leverage game mechanics to crush the competition.
36. Herger, M. (2013): The gamification score as a more accurate measure for employee evaluation.



About PageUp

Creating Technology That People Love To Use - Connecting The Careers Of 100 Million People.

Our state-of-the-art technology solutions unify Recruitment, Performance Management, Learning, Career Planning, Succession Management and Workforce Analytics to help multinational employers overcome the talent management challenges inherent to operating across multiple geographies. The PageUp People teams in Singapore, Shanghai, Melbourne, Sydney, London and New York can help transform your company's global HR initiatives.

Learn more about how PageUp can help at www.pageuppeople.com

About the Author - Sylvia Vorhauser-Smith

Sylvia Vorhauser-Smith is Senior Vice President – Global Research, at PageUp. With 25 years of experience as a senior talent management and human resources practitioner and consultant, her career has included corporate finance and HR roles at Citibank and Westpac. Prior to joining PageUp, Vorhauser-Smith was Founder and Chief Executive Officer of consulting firm Talent Edge, specialising in bespoke leadership development and talent management solutions.

Committed to thought leadership in the fields of neuroscience and cross-border talent management, she speaks internationally on these topics and has addressed audiences in the U.S., Asia and Australia. She is a featured contributor to Forbes Magazine and author of numerous white papers on talent management and applied neuroscience. Vorhauser-Smith holds a Bachelor of Business, Post-Graduate degrees in Psychology and a Master of Science in NeuroLeadership.