A Report by the Thames Valley Branch Study Tour Team 2012: Sachio Baig, Laura Beasley, Scott Blunden, Alexa Briggs, Richard Holland, Leila Kirk, Fernande van Schelle, Douglas Silva, Natacha Redon
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List of Abbreviations

The following abbreviations and acronyms are used over the course of this report:

APM - Association for Project Management
Apps - Applications
BoK - Body of Knowledge
DWP - Department for Work and Pensions
CEO - Chief Executive Officer
GRN - Gamification Research Network
TVB - Thames Valley Branch
VTA - Ventral Tegmental Area
WBS - Work Breakdown Structure
Introduction

The purpose of this report is to document the investigations of the APM Thames Valley Branch Study Tour into ‘Gamification’. The study Tour Team have carried out a yearlong study into the use of this emerging practice, by speaking to best practice experts in industry and testing out the theories for themselves. In this report the information that has been collected is presented along with a discussion into the positives and negatives of the technique, and a set of recommendations by the Study Tour Team into the best methods for implementing Gamification into a project environment.
Study Tour Selection

In October 2011 the Association for Project Management (APM) announced that the annual study tour would be taking place over the following twelve months, and invited branches to submit proposals. The category for the study tour was open, so once the Thames Valley Branch (TVB) decided that a submission would be made, there was a large amount of free range to choose an idea to study. The APM TVB Study Tour Team came upon the emerging practice of Gamification, and decided that it would be interesting to see if this methodology could be applied to the project management profession.

A Proposal document was put together, detailing the reasons why we wished to look into this practice, the benefits to the APM, a project plan and proposal budget. This was submitted to the APM in January 2012, along with other Branch entries from across the UK. The APM evaluated these entries against set criteria, and in February 2012 the TVB study tour team were informed of the success of the bid, and the securing of the budget requested to perform the study.

In being selected for this process, the TVB team agreed to meet the deadline of study of the 23rd September to present our findings to the APM Forum, producing this report to document the findings to the wider APM community, and in running an evening event to promote a discussion on the positives, negatives and usage of Gamification.

The proposal document put together by the TVB team can be found within Appendix A.

Profiles of the Study Tour Team can be found in Appendix G.
Study Tour Methodology

Agile

The TVB Study Tour Team had decided to run this study using Agile methodology. This would ensure that there would be double benefits to the APM in terms of an investigation into another non-standard project management practice, and documentation of the study tour team’s experiences in using the Agile methodology.

Explained very simply, Agile is a different way of managing teams and development projects. It is based on the following four important values.¹

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

Favouring these values highlighted in bold gives the practice of Agile flexibility and freedom to react with agility to emerging issues. This method of working has historically been suited to software development or research projects, and helps to retain focus on the important issues in a fast changing environment. This is important in order to deliver the right result at completion, when the method of getting there may not have been clear to begin with, and helps to maintain a level of flexibility with the customer.

Scrum is a very popular and widely adopted Agile method, which concentrates on how to manage tasks within a team. A Scrum Team will have two main ‘leaders’. A Scrum Master; someone who typically acts as the customer interface and who performs reporting and task administration roles, and a Product Owner; someone who manages the technical solution and ideas generation for the product. A typical Scrum process may go as such:

- The Product Owner creates a prioritised list of tasks called a Product Backlog, which contains all conceivable tasks at the time.

¹ [www.allaboutagile.com/what-is-agile-10-key-principles](http://www.allaboutagile.com/what-is-agile-10-key-principles)
• The Scrum Master initiates a ‘sprint’; this is a set period of time, of which there are many sprints within the project. The Sprint begins with a sprint-planning meeting where each member of the scrum team are invited to select tasks from the Product Backlog. This ensures that each team member ‘buys in’ to the work for each sprint, and is accountable to the rest of the team for completion. The development team creates a plan for the sprint which forms the Sprint Backlog.

• The sprint can be anything from one week to four weeks long, but it is best to keep each sprint period the same length to facilitate planning. The scrum team keep in regular contact through a daily scrum meeting, which assesses progress.

• The sprint ends with a sprint review and retrospective in order to capture lessons learned from the sprint and to make adjustments for the next sprint.

• As sprints progress the Product Owner makes adjustments to the Backlog, adding or removing tasks as necessary until the method of project completion is detailed to the current level of understanding.

• The cycle repeats until the product backlog has been completed.

• Stakeholders are communicated to on a regular basis based on what has been achieved during the latest sprint.

The TVB Study Tour Team proposed a 12-sprint programme based on the timescales available, with each sprint being two weeks long. Information on the Study Tour Team’s sprints and reporting methods can be found within Appendix B.

The Backlog

The product backlog is a prioritised features list, containing short descriptions of all functionality desired in the product. When using Scrum, it is not necessary to start a project with a lengthy, upfront effort to document all requirements. Typically, a Scrum team and its product owner begin by writing down everything they can think of easily. This is almost always more than enough for a first sprint. The Scrum product backlog is then allowed to grow and change as more is learned about the product and its customers. The full Study Tour Backlog can be found at Appendix C.
A typical product backlog comprises the following different types of items:

- Features
- Bugs
- Technical work
- Knowledge acquisition\(^2\)

**Stakeholder Management and Communication**

- The team had weekly calls to provide status updates and ask for any help they needed with their assigned tasks.
- At the start of each sprint there were sprint planning calls where each team member volunteered and committed to picking up tasks off the backlog and completing them by the end of the sprint.
- At the end of the sprint the tasks were reviewed for completeness and the backlog re-ordered by the product owner to plan the next sprint based on the progress and results.
- The team used ‘Project Place’, an online project management tool which automatically created a Work Breakdown Structure (WBS) out of the tasks assigned during each sprint.
- Stakeholders received a sprint report at the end of each sprint recording progress and giving updates. Team representatives also attended the Thames Valley Branch monthly meeting to report progress.

**Team Structure**

The TVB Study Tour Team was organised into the following Scrum Project Organisation:

Agile Lessons Learned & Retrospective

Over the course of the study tour, the team took regular note of the lessons learned, and improvement actions. A summary of the Agile lessons learned is included below.
### Theme: Agile Admin
- **Issue**: Project Place not up to date
  - **S/F**: Success
  - **Impact**: Reporting to our stakeholders is showing an incorrect and negative picture, other team members are not clear on progress and status of tasks, confusion and frustration for team members.

### Theme: Agile Process
- **Issue**: Tasks not being completed within sprint, delays not being raised until the deadlines have already passed
  - **S/F**: Failure
  - **Impact**: Lack of progress for the tour, individual commitments from team members for the two weeks work not being met, unable to plan and get an idea for work load, issues not being raised until deadline passed so no opportunity for other team members to help to keep things on track.
- **Issue**: Some team members have been going ‘Off Backlog’
  - **S/F**: Failure
  - **Impact**: This has lead to confusion at material produced and a divergence in team direction. Team members who have done the Off backlog tasks have been frustrated as their work may have been discarded.
- **Issue**: Tasks allocated in absence without being explained
  - **S/F**: Failure
  - **Impact**: Tasks got put off - creating guilty feelings, misunderstandings.
- **Issue**: There has been a good feeling in the group to ‘try something new’
  - **S/F**: Success
  - **Impact**: Agile methodology has been great and many who have not used it before have allowed themselves to be lead through.
- **Issue**: Strong ScrumMaster Role
  - **S/F**: Success
  - **Impact**: This has enabled the group to continue pushing on, even when loss of focus has occurred
- **Issue**: Strong Product Owner Role
  - **S/F**: Success
  - **Impact**: This has enabled the group to continue pushing on, even when loss of focus has occurred

### Theme: Backlog
- **Issue**: Focus on telecons being on immediate tasks with no helicopter view
  - **S/F**: Failure
  - **Impact**: Telecons focus on day-to-day activities, with the risk that we do not assess whether we are achieving our targets.
- **Issue**: Product Owner’s commitment to the backlog has been excellent
  - **S/F**: Success
  - **Impact**: Great direction and focus to the tour and to the team.
- **Issue**: Strong forward looking ethos from ScrumMaster & Product Owner
  - **S/F**: Success
  - **Impact**: Inspetus of study kept us and allows us to focus our mind and data collection on future work - higher efficiency.

### Theme: Commitment
- **Issue**: Poor attendance on calls and late notice given of clashes/issues attending
  - **S/F**: Failure
  - **Impact**: Lack of progress on key items in the sprint, wasting the time of other members of the group.
- **Issue**: The need for all team members to complete some initial research on Gamification & Agile has lead to a sluggish start
  - **S/F**: Failure
  - **Impact**: Main meat of the study has not been reached at optimum time, and this has meant that some of the ‘Nice to have’ study tour items have been dropped.
- **Issue**: Some team members have been losing focus / commitment
  - **S/F**: Failure
  - **Impact**: Tasks have been assigned that have not been completed. Additional work has had to be soaked up by others.
- **Issue**: Loss of motivation and engagement towards the end of the tour
  - **S/F**: Failure
  - **Impact**: Lack of focus, compromise on quality.
- **Issue**: Documentation on the BP experts is a really great piece of work
  - **S/F**: Success
  - **Impact**: Great standard of work, communicated well, that will really have an impact on the outcome of the tour.
- **Issue**: Fantastic team ethos. Team willing to pull together and follow the vision set out by the backlog.
  - **S/F**: Success
  - **Impact**: Everyone knows what they are supposed to be doing, and by when. This has meant that everyone is working to the same page, and no one gets too far ahead of the rest of the group inadvertently.
- **Issue**: Large amount of BP experts contacted
  - **S/F**: Success
  - **Impact**: Fast progress on the BP expert interviews.

### Theme: Communication
- **Issue**: Lack of face to face meetings & Mid day telecons have proven difficult
  - **S/F**: Failure
  - **Impact**: Telecons tend to just be a tick the box activity and real mature discussion does not occur. This means that real project decisions do not get discussed, and messages do not get through.
- **Issue**: Tasks allocated end date without consultation with member allocated to
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  - **Impact**: Tasks got missed.
- **Issue**: More regular updates on task progress by some members
  - **S/F**: Failure
- **Issue**: Team members should report absences on meetings and calls
  - **S/F**: Failure
  - **Impact**: We never knew who to expect to show up or ring

### Theme: Resource
- **Issue**: Prioritisation of work commitments
  - **S/F**: Failure
  - **Impact**: Inability to dedicate committed time to the study as day job takes precedence, short notice meeting cancellations.
- **Issue**: Keeping commitments in mind - both Study Tour and overall Ignite commitments
  - **S/F**: Success
  - **Impact**: Ignite promises are more likely to be kept

### Theme: Standard of work
- **Issue**: Great ideas and discussion sharing on calls and e-mails from the whole group
  - **S/F**: Success
  - **Impact**: Enthusiasm and drive to drive the tour forwards and come up with some really interesting themes to explore.
- **Issue**: Excellent documentation by project team
  - **S/F**: Success
  - **Impact**: We have created a fantastic database of material from which to use.
- **Issue**: High level of work going into producing documentation
  - **S/F**: Success
  - **Impact**: Incites other members of group to do more.
- **Issue**: APM Forum Presentation
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Table 1 - Agile Lessons Learned
Gamification Theory

Why are people interested in Gamification?

The concept of Gamification is to tap into the basic desires and needs of any individual: impulses which tend to revolve around competition, the idea of status and achievement, and in some cases, even a form of self-expression. These desires and needs are embodied in us all and are what gives Gamification the potential to become such an effective tool amongst the masses. In the case of Gamification within the workplace or project team, the key to success is in the ability to create game play and generate the ensuing dynamics that will appeal to those who do not typically play computer games on a regular basis.3

Gamification gurus Bunchball, illustrate the allure of the concept of Gamification with the following interesting analogy:

“At its core, Gamification is all about statistics. If two people play Monopoly every day for a week, it’s going to get boring pretty quickly. But if they start capturing and displaying statistics — how many times each person won, how many dollars each winner had, which properties were most profitable — then the experience becomes more interesting. These statistics create another level to the game and motivate people to play more. In essence, the statistics become the game. Can you become the #1 ranked Monopoly player in your group of friends, in the state, in the country? Can you own Boardwalk and Park Place five games in a row, and thus win a special trophy? Can you earn Monopoly Points for every dollar you end the game with, and collect those points toward some ultimate reward?”4

In terms of Gamification within the workplace, it is this excitement generated by the collection of a number of statistics, and the use of those statistics to encourage behaviour in people to perform tasks they would ordinarily consider boring or strenuous. It is this application that has created a large amount of interest within the business world.

3 http://playgen.com/the-principles-of-Gamification/
Why are we looking at Gamification?

The TVB Study Tour Team looked into the topic of Gamification with the sole reason of understanding the Gamification concept, how it could be applied to projects and the possible benefits or risks associated with Gamification. The team also connected with best practice experts on the topic of Gamification in projects, and have used this knowledge to form a set of recommendations to the APM. This study tour report aims to communicate these findings and recommendations back to the APM community. This should allow those interested to try out the concepts and generate further discussion about the value of Gamification and its possible uses within project management relevant industries, both traditional and new.

Projects and Games share some noticeable traits. Games are usually driven by coherent goals, well-defined player roles and meaningful metrics to provide feedback on progression. Likewise, well-managed projects are guided by cogent objectives; team members (akin to players) have delineated roles and intelligent metrics that are employed to measure progress. The significant difference between the two lies in gaming feedback, which is transparent, instantaneous and public. The TVB study Tour team aimed to investigate the possible employment of these techniques in a project management environment.

Who will it benefit?

The APM TVB Study Tour Team believes that through the investigation of this interesting new technique we will be able to introduce new ideas that will benefit the project management community. The use of the tools and methods that we have uncovered have the potential to benefit project managers from all industries, due to the fundamental psychological people management skills at the heart of the process. This study ties in with the ‘thought leadership’ that is currently being promoted in the PM community and will add to the bank of knowledge that will drive the profession forward.

5 http://www.pmhut.com/Gamification-of-project-management
Where does Gamification come from?

Gamification originates from within the computer games industry; Software companies tried to introduce the same kind of concepts into work life as they were developing within the games that they were making. They found that their employees responded extremely well to being awarded ‘badges’ dependant on their performance, or duration of effort, as taken from their favourite games. These sorts of attitudes are best displayed within the game ‘World of Warcraft’, where gamers can complete the main game objectives, but then spend hundreds of further hours completing side objectives, collecting points and enhancing the profile of their character. The Gamification culture within these gaming organisations developed to such a point that employees were actively striving to out-do each other by completing difficult tasks or working the longest hours in order to obtain status ‘badges’.

Within the last two years, Gamification has started the transition into mainstream industry as a deployable tool used to increase engagement and motivation of a workforce. This transition has been facilitated by the increased availability of appropriate technology and connectivity, such as smartphones and tablets, which can support a Gamification environment.

Who uses Gamification?

The basic principles of Gamification have been around for over a decade in Internet consumer engagement applications (apps), frequent flyer cards, loyalty schemes, healthcare fitness programmes and more. Many companies have introduced Gamified schemes to increase customer engagement, or increase employee engagement. These schemes motivate the customer, consumer or user to continue buying or using a product, or engage the user’s interest and motivation.

Starbucks, Nike, eBay, Salesforce and Badgeville are some examples of companies that have found success with the idea of employing game-like activities to improve business and customer interaction. In recent years though there has been increased demand to move Gamification into the workplace to satisfy the ‘Xbox generation’. Lee Sheldon, a gamer, game designer and Assistant Professor at Indiana University,
USA, believes managers may have to rethink how they engage the next generation entering the mainstream workforce.

“As the gamer generation moves into the mainstream workforce, they are willing and eager to apply the culture and learning techniques they bring with them from games.”

The view that the ‘gamer generation’ being the sole audience for Gamification seems to be a little short sighted however, as there are plenty of elements of the Gamification concept that could be beneficial to a person of any age, gender or background. Gamification encompasses many elements that could be employed successfully within a work environment to create fun, motivate, and increase productivity in employees from any background. It seems that the enthusiasm for Gamification continues to increase as there are now several specialist courses running at international universities that help people to become a master of human motivation and engagement through the use of Gamification.

**Review of Gamification theory – What is it?**

When defining the term Gamification, there are a number of different interpretations of the method, situations and context in which Gamification should or could be implemented. Some people refer only to Gamification as used within the software industry, in which the practice was first utilised. Others argue that Gamification is to be used as a sales and marketing tool to capture the interaction of online customer base. Increasingly though, there are a number of references to Gamification as a project management tool.

Put very simply, the base level of understanding of the term Gamification is universal to every context in which it is applied:

“Gamification is the use of game design elements, game thinking and game mechanics to enhance non-game contexts.”

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This is in essence the main function of the tool that Gamification could provide – enhancing a situation through the use of gaming mechanics, the benefit of which is the increased engagement, motivation and interaction of the target user or audience in any given tool, process or activity.

For a Project Management Study, this tool sounds potentially very interesting; one of a project manager’s main objectives must be to increase the engagement and motivation within their team, in order to improve performance and strengthen the working relationships.

The principles of Gamification are based around the ability to help create and sustain relationships between the user and a product – in our case ‘the project’. The use of engaging and entertaining games as an additive to the working environment are designed to resonate and entice both gamers and those not interested in typical gaming practices.

By engaging multiple users in a product you create a community. Allowing interaction within that community creates a societal attraction – one of the intrinsic factors that encourages a user to return. Gamification essentially could create a sense of community within a project or organisation, which in turn should inspire engaged users to contribute at a much higher level due to the camaraderie and loyalty that they now feel.

This indeed must be the main function of Gamification, which is in itself not adding any measurable value to a project or organisation. Through enhancing the commitment and engagement that people or functions bring and in developing key human emotions such as loyalty, pride, commitment, work ethic, effort and willingness to win.

When explaining the relevance of Gamification in a business environment, Bunchball – an organisation at the forefront of developing Gamification for business needs describes business Gamification as follows:

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8 http://playgen.com/the-principles-of-Gamification/
9 Jono Bacon, *The Art of Community*
‘At its root, Gamification applies the mechanics of gaming to nongame activities to change people’s behaviour. When used in a business context, Gamification is the process of integrating game dynamics (and game mechanics) into a website, business service, online community, content portal, or marketing campaign in order to drive participation and engagement.’

In the business environment, use of Gamification theory should help to make technology more engaging, encourage users to engage in desired behaviours, shows a path to mastery and autonomy, help to solve problems by reducing distraction, and take advantage of humans' psychological predisposition to engage in gaming.

**Current Awareness within the APM**

Before commencing the TVB Group’s study into Gamification it was important to be able to understand the current level of Gamification Awareness within the APM community. This would not only give the group a measure of understanding of the wider community’s knowledge of the topic, but also to how the TVB group could best aim the Study Tour to benefit the APM community as a whole. In addition to this the TVB Study Tour Group will also use this survey as a success factor measure, in order to be able to see if understanding and awareness of Gamification had been increased within the APM community over the duration of the Study; Something which has been promised in the proposal for this Study Tour (See Appendix A).

In order to do this, the group issued a survey to the APM community at the beginning and end of the study. This gave a clear and objective measure to the group as to whether success could be claimed for the increase of Gamification awareness within the community.

It was decided to publish the survey to cover a large portion of the country, but not the country as a whole as an overload of information was not necessary to get a feeling for the general awareness within the APM community. The survey was published to the whole of the South of

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England, approximately 9000 people. A 1% return of 95 responses was deemed to be an acceptable level to draw conclusions from.

Of the 95 responses from the survey, it was immediately clear that the demographic that we were sampling was representative of the overall APM demographic (Figure 4 & Figure 5). The TVB Study had 86% of responses being male (Figure 2), and over 50% being over the age of 50 (Figure 3). This reflects against the APM demographic, where 85% of APM members are male, and the main percentage of APM members fall within the 40-60 range.
This was particularly interesting due to the nature of Gamification being driven supposedly by the ‘Xbox Generation’, and therefore we expected a very low level of understanding or awareness of the Gamification methodology.

As expected, upon asking the questions ‘Are you aware of the term Gamification?’ (Figure 6) and ‘Are you aware of the basic concepts behind Gamification?’ (Figure 7) a very low ‘Yes’ response was received.

This result strengthens the case for the study tour into Gamification in order to promote the understanding of this potentially useful tool for the Project Management Community. It also gave the TVB group a better understanding of how to angle this tour and how to engage the APM community.
From the group of people who answered ‘Yes’ to being aware of the concept of Gamification, we asked to explain Gamification in their own words (Figure 8), and generally a good level of understanding was observed in the answers we received. People correctly identified themes such as Game Techniques, Rewards and Incentivisation.

The results shown above do however give us a clear understanding that the awareness on the concept of Gamification within the wider APM community does not stretch much further than an understanding that it uses ‘Game Techniques’. Therefore it is this understanding that must be increased, in order to make the Project Management Community think about the uses of Gamification for things such as motivation, engagement, incentivisation, community, recognition, status, achievement and loyalty.

**So what really is Gamification?**

With Gamification seemingly making the jump so easily between Game-play and the Workplace, what are the similarities and differences and what does this tell us about the potential for use in the workplace?

With all the hype and interest around Gamification, it is important to understand the real key values, and why this method may work, and, in
turn, why people might wish to try this out. Many characteristics of work and play are similar, but user perception of them is very different. The intention of Gamification is to try and bring some of the characteristics of Games into the workplace.

<table>
<thead>
<tr>
<th>Source:</th>
<th>Work</th>
<th>Game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>mid to low</td>
<td>High</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Failure</td>
<td>forbidden, punished, don’t talk about it</td>
<td>expected, encouraged, spectacular, brag about it</td>
</tr>
<tr>
<td>Feedback</td>
<td>once a year</td>
<td>Constantly</td>
</tr>
<tr>
<td>Goals</td>
<td>contradictory, vague</td>
<td>Clear</td>
</tr>
<tr>
<td>Information</td>
<td>too much and not enough</td>
<td>right amount at the right time</td>
</tr>
<tr>
<td>Narrative</td>
<td>only if you are lucky</td>
<td>Yes</td>
</tr>
<tr>
<td>Obstacles</td>
<td>accidental</td>
<td>on purpose</td>
</tr>
<tr>
<td>Path to Mastery</td>
<td>Unclear</td>
<td>Clear</td>
</tr>
<tr>
<td>Promotion</td>
<td>kiss-up-o-gracy</td>
<td>Meritocracy</td>
</tr>
<tr>
<td>Rules</td>
<td>Unclear, intransparent</td>
<td>clear, transparent</td>
</tr>
<tr>
<td>Speed/Risk</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Status of Users</td>
<td>Hidden</td>
<td>transparent, timely</td>
</tr>
<tr>
<td>Tasks</td>
<td>repetitive, dull</td>
<td>repetitive, fun</td>
</tr>
</tbody>
</table>

Table 2 - Characteristics of Work & Play

These characteristics of Games as above can benefit the work place by bringing much greater clarity.

A project team using game rules would encourage each team member to be assigned clear accountable goals with immediate feedback on progress. There would be a clear recognition and reward policy which would also recognise a team member’s status and level of mastery. Using Gamification in a project team could help to set out the ground rules and layout a transparent and clear structure that otherwise might only be inferred. It could be an important method for helping the Project Manager understand what the team have to do, and, inversely, the team to know what the manager wants them to do in order to achieve as a project.

12 http://Gamification.org/wiki/Gamification_of_Work
To be able to apply Game characteristics to the workplace an understanding is needed of the mechanics and dynamics that make up a Game environment, and how they should best be applied to a project team. Game mechanics are the building blocks of Gamification; they are the control methods and behaviours used to maintain and drive the Gamified system. They can be both rule and reward, and provide the challenge needed to begin gaming. Game dynamics are related much more closely to the game characteristics as described above, they are the elements that create the game and cause people to continue to play the game, sometimes to the point of addiction. Game dynamics relate much more closely to emotions, desires and motivations.

As part of the TVB Gamification Awareness survey we asked participants whether they were aware of any methods used to motivate a team (Figure 9) When asked to name some of these methods used to motivate team members (Figure 10), a large amount of the APM community were correctly able to name at least one of the key dynamics of Gamification, which are also key knowledge areas covered within the APM Body of Knowledge (BoK), even though they did not originally think they understood the Gamification concept.
Game Mechanics

There are four main banners under which Gamification manifests itself. The understanding and correct application of these four subjects together produces a Gamified environment under which engagement, loyalty and motivation can flourish.

The four elements are;

1. **Points** – something for players to earn
2. **Rewards** – something for players to spend their earned points on
3. **Badges** – something to show peers the achievements you have ‘unlocked’
4. **Leader boards** – a method of gaining some real time feedback which is visible to all
There are a number of nuances that it is important to understand before proceeding in setting up Gamification which are explored below in more detail.

Points

Points provide the main means of currency within the Gamified system. In order to earn points people have to complete tasks, the more points that a person earns gives some indication as to the credibility of the player.  

The reason that Gamification works so well is because the natural human psyche urges you to collect resources, and the more resources you have, the greater your status.

Points can be a great way to virtually move up in an organisation and at the same time demonstrate to all that you are staying on task.

Points can work as a fantastic motivator, especially due to the fact that in a Gamified workplace points can be used to reward users across multiple dimensions, and different categories of points can be used to drive different behaviours within the same site or application.

However points are not only used as status indicators; in a Gamified workplace points can be used to ‘buy’ items or services as determined by the organisation.

In project management terms, the earning of points can also be a good way for project managers to track team performance, or to direct behaviours. With the earning of points the project manager has the opportunity to incentivise tasks according to the importance of specific activities at any given time, and to recognise good performance within the team. By monitoring the earned points of the project team, the project manager also has a metric to act as an early warning system to highlight poor performance in real time.

Rewards

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13 http://playgen.com/the-principles-of-Gamification/
14 http://mashable.com/2011/12/05/Gamification-workplace/
As in a game, if a player earns points and completes challenges there must be a reward, and a reason for having done the task. Therefore, in the workplace this must also be true.

According to purist Gamification theory, as in a game the reward should be non-monetary; the earning of the reward is a reward in itself! According to a University of Chicago study the impact of earning points on performance was notable. This was regardless of whether the points and their respective rewards had any real monetary value or not. In the workplace though, some organisations choose to set up rewards portals from which employees can purchase a variety of rewards from the points they have collected. Rewards may range from; team dinner, vouchers for family days out, lunch with directors, access to company private venture funding, a role on a future top secret project.

In order to increase the chances of people continuing to wish to spend their points, and therefore making them more likely to perform tasks and earn points it is very important that the rewards that can be purchased are regularly refreshed for new opportunities.

Badges

A key human desire that has particular impact within the workplace is the desire to show one’s competency.

In the regular workplace the only way it is possible to do this is through the standard office hierarchy — even though the fact that someone is above you in the hierarchy does not necessarily always mean that they are more competent than you! Within Gamification there is a method for displaying competencies so that all are able to recognise an individual’s ability. Just as in the Military Forces, where badges showing training received, competency and responsibility are displayed on uniforms - players within Gamification can also earn badges which can be seen by the organisation and peer groups.

These trophies that symbolise a gamers’ ability to perform and are permanently attached to a players profile act as a record of achievement. They become an indication that a player has reached a certain level of accomplishment and therefore should be offered an

16 http://playgen.com/the-principles-of-Gamification/
amount of respect for doing so. Badges are often seen as long term achievements, and are a determining factor for keeping people challenged in a Gamified system.

In a project environment the best approach may be to configure challenges based on important project tasks that are being tracked, and rewarding the team members for reaching milestones with points, badges and recognition.

Gamification experts Bunchball describe the use of badges as the means of displaying social status.

‘Trophies, badges, ribbons, etc. are the visible recognition of having reached new levels or completed challenges. One of the keys to making levels and challenges effective is providing a forum for users to show off their achievements, like a trophy case or user profile page that displays their badges.’

Leader boards

An extremely important part of the Gamification system is in the element of recognition that employees can attract through their collection of points and badges. This element of recognition can be both within their project team, peer group or to senior management. One method of promoting recognition is through the use of leader boards. By accumulating points or recognition, that are displayed on leader boards, workers can advance through the ranks and be recognised by their teammates. This public ranking of peer groups can help gentle workplace competition and aid team development, as it feeds the human social need to compare oneself transparently and objectively against friends, peers and experts alike.

In a Gamified workplace being at the top of a leader board feeds the players’ need for recognition, social status and self-worth, whilst being lower down on the leader board has the effect of encouraging people to try harder to improve their placing. It is this element of competition that drives people, and satisfies their need for challenge and reward.

18 http://mashable.com/2011/12/05/Gamification-workplace/
Gamification is able to assist this motivation of a workforce through target setting, points reward and ranking. The use of Gamification also means that whilst people are able to ‘win’ by being top of a ranked leader board, all other players are still getting prizes in the accumulation of points, which can be put towards rewards later.

To some people the element of social recognition may be more important than tangible prizes. Those looking to climb the corporate ladder might be more pleased with gaining recognition through Gamification. Social goals offer a strong feedback loop for employees and let them adjust their habits in full view of co-workers and managers. Colleagues can also track and recognise each other for a job well done. It’s a great way for managers to look at a team’s work and offer praise or useful feedback when necessary.

**Game Dynamics – Meeting Psychological Needs**

Game Dynamics manifest themselves in a whole multitude of different emotional, desirous and motivational elements. These elements relate to fundamental human needs and desires and by relating them in turn to the psychological aspects of Gamification, we can gain an understanding of how Gamification can help you to increase engagement in an organisation system and the project. The table below shows the key elements of Game Dynamics (Table 3).

<table>
<thead>
<tr>
<th>Game Dynamics</th>
<th>Reward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human beings are motivated by receiving rewards — something of value given for some kind of action. A reward, tangible or intangible, is presented after the occurrence of an action (i.e., behaviour) with the intent to cause the behaviour to occur again. With Gamification, the primary reward mechanism is through earning points or the equivalent (like frequent-flyer miles). But obtaining virtual goods, levelling up, and even completing achievements also satisfy this desire.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most humans have a need for status, recognition, fame, prestige, attention and, ultimately, the esteem and respect of others. People need to engage themselves in activities to gain this esteem, though. All elements of game mechanics drive these dynamics, with levelling-up (such as getting a gold or platinum credit card) being one of the primary motivators.</td>
</tr>
</tbody>
</table>

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19 [http://mashable.com/2011/12/05/Gamification-workplace/]
Some (but not all) people are motivated by a need to achieve, to accomplish something difficult through prolonged and repeated efforts, to work towards goals, and to win. People motivated by achievement tend to seek out challenges and set moderately difficult (but achievable) goals. Their most satisfying reward is the recognition of their achievements.

Self-expression

Many people want and need opportunities to express their autonomy and originality, to mark themselves as having unique personalities from those around them. This ties into the human desire to show off a sense of style, identity, and personality and to show off an affiliation with a group.

Using virtual goods is a common way for players to create their own identity, whether they are earned through rewards, received as gifts, or bought directly with real currency. A person’s avatar can often serve as a rich focal point for expression.

Competition

Individuals can also be motivated by competition. It has been proven that higher levels of performance can be achieved when a competitive environment is established and the winner rewarded. That’s because we gain a certain amount of satisfaction by comparing our performance to that of others.

All elements of game mechanics tap into this desire, even self-expression, but the use of leader boards is central to display competitive results and celebrate winners. Most all games provide at least a simple top ten list, and using that public display to indicate new levels achieved, rewards earned, or challenges met can be a great motivator to other players.

Altruism

Gift-giving is a strong motivator if you have a community where people seek to foster relationships. Not all gifts are equal, so in a world of free and commodity items, motivated gifters will seek out a more valuable form of expression, either through money or through time spent earning or creating the gift.

In Gamification, gifting is an incredibly powerful acquisition and retention mechanic. You receive a gift from someone that pulls you into the game, and then you’re incented to send gifts to all your friends, creating a great acquisition loop. And every time you receive a gift, it pulls you back into the application to redeem it, so it serves as a powerful retention vehicle as well.

Table 3 – Game Dynamics

How do you convince people?

The best possible way to begin convincing people to take up and use a new idea is to begin with something simple which is easy to use. At the same time it must be entertaining and fun, and generate a level of interest in people that will make them want to join in and compete. The implementation must be shown to be a positive, rewarding system that can have a positive impact on daily working life, and a longer-term application in regards to personal profiling and future career prospects.

The most important factor in making the take up of Gamification more successful is in the leadership shown towards the method, and the critical mass of those interacting with the system. If the Project Manager can ensure and communicate convincingly, that the experience is a rewarding one, which challenges and invigorates people’s working life – then the Gamification experience should be successful. There must be a clear observable benefit to both the organisation and the individual.
taking part, and it is up to the Project Manager implementing Gamification to convey this in order to cement initial engagement.
The Gamification of Ignite – A Case Study

At a very early stage in the Study Tour the team (called ‘Ignite’) decided that one of the best methods to really understand the Gamification process, the subtle nuances of the Gamified work place, and the necessary efforts of the Gamification set up and maintenance process was for us to Gamify the study tour group.

We decided that we would try to implement Gamification on our group in a very fast and little-thought about approach. The reason for giving such little-thought in setting up badges, points and leader boards would be to understand the effects - both negative and positive - of Gamification if it were to be applied without any prior understanding of the concept. In doing so, we aimed to be able to offer some best practice recommendations from our own experience as to the best method for implementing a Gamified work place within the project management community.

To begin with the Study Tour team undertook a planning session to understand what the team could be measured for, and what sort of points and rewards would be offered. The team documented carefully the rules for the earning of points to ensure transparency. The reference document created by the team is appended to this report at Appendix D.

The team initially identified six different categories under which the team could earn points, and under which leader boards would be kept. The categories we picked were specifically chosen to be behaviours that we most wanted to encourage within our project. The categories picked were given as such:

**Sprint Finisher** – Points are earned under this category for those first, second and third placed players who finish all allocated sprint tasks. To account for a differing number of tasks within a sprint, the scoring system is weighted to

![Figure 11 - Sprint Finish Stats](image)
allow for those with greater number of tasks to gain the higher places (Figure 11).

**Meetings Master** – Points are earned by each team member attending a Study Tour event. Attendance in person gains greater points than attendance by telephone.

**Opportunity Oligarch** – Opportunity points are gained on a special case-by-case basis, and at the discretion of the Scrum Master. If the Scrum Master feels that a certain member of the Study Tour Team has captured a particularly special opportunity for the team then they can be awarded opportunity points. There are varying levels of importance and points are awarded accordingly.

**Vital Virtuoso** – Vitality points are awarded to team members who undertake an extra special effort for the team which is deemed to have been a vital task, meeting or contact made. Vitality points are awarded in levels of importance by the Scrum Master.

**Event Specialist** – Points are awarded to team members for every APM event attended. If the player is able to promote the TVB Study Tour then bonus points can be earned!

**Recruiting Privateer** – If a player recruits a new member to join the Study Tour Team then they are awarded points. Additional points are also awarded based upon the new recruit’s success and participation in the study tour.

A leader board for each points category, and an overall total were published each week (Figure 13).
The team spent a lot of time debating how rewards might be offered to the group. In most organisations implementing a Gamified system, a rewards portal is in place whereby players can exchange points earned for goods and opportunities offered by the company.

In the case of our Study Tour Team, we were not able to offer the type of rewards that might be given in organisations. We therefore decided that each team member would submit a list of items or services that they would be prepared to give any other team member for free. These were then assigned a value for other players to be able to purchase these items, and listed in a rewards register for team members to browse and decide when to spend their earned points. Rewards offered within the team were items such as loaned DVDs or books, baking of cakes and a Labrador puppy playtime!

The main aims of implementing Gamification within the Study Tour Team was to see what impact ensued on each member of the project team, to get individual feedback from the point of view of the Gamified and the Gamifier, and to see what recommendations we as a team could draw from this in order to be able to suggest methods for those also wishing to try out the Gamification tools.

We particularly wanted to understand as a Gamifier, how we could affect people’s behaviour, positively and negatively; and, as the Gamified workforce, how we responded to good or bad Gamification implementation.
Ignite Observations

The setting up and trial of the Gamification tool was a useful test to see the benefits, challenges and successes of using Gamification. Having had first-hand experience of trialling a Gamified system, the study tour team believe that there are many further changes, improvements and lessons to be learned. The prototyping of this tool was an extremely useful task, and would be a recommendation in itself for anyone thinking of setting up Gamification, to get and insight into the implications involved. The study tour team found this Gamification tool to be something that increased engagement, however did not run the study tour – This was done by the Project Managers, with the tool as a supporting measure.

The table below contains the lessons learned by the Study Tour Team as a result of the experimentation carried out in the Gamification of Ignite task.

<table>
<thead>
<tr>
<th>Set Up</th>
<th>Comment</th>
<th>Category</th>
<th>Success / Failure</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you promote an exciting vision, people take it up.</td>
<td>Leadership</td>
<td>Success</td>
<td>Hype definitely helped the introduction of the Gamification process, and meant that people were motivated and interested to try it out.</td>
</tr>
<tr>
<td></td>
<td>‘Points’ become a much talked about thing, even before any are being given out.</td>
<td>Team Ethic</td>
<td>Success</td>
<td>The idea of collecting points quickly took hold within the team. It then became part of the daily conversation, if it was pushed by the PM. Improved cohesion and ‘banter’ within team.</td>
</tr>
<tr>
<td></td>
<td>People who did not feel as if they were being measured with the team were very annoyed – they felt an instant lack of appreciation.</td>
<td>Inclusivity</td>
<td>Failure</td>
<td>Gamification must be set up to measure all or none. You cannot leave anyone out who may wish to participate as this causes demotivation very quickly.</td>
</tr>
<tr>
<td></td>
<td>Some felt that as they had joined the process later, and therefore the ranking was unfairly biased. Wanted a progress chart to show that they had done something.</td>
<td>Game Rules</td>
<td>Failure</td>
<td>Think of a strategy to ensure new joiners can play immediately so they can be in direct competition with leaders or with themselves immediately</td>
</tr>
</tbody>
</table>
It worked very well having sat down and agreed scoring rules and categories with everyone beforehand – this led to instant buy in and uptake.

The transparency of the scoring rules is paramount, as this empowers the players to be able to decide where to focus attention to get maximum benefit for their own profile.

<table>
<thead>
<tr>
<th>Tool in Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comment</strong></td>
</tr>
<tr>
<td>People are eager to claim their points</td>
</tr>
<tr>
<td>As soon as a ranking emerged it made most feel like they wanted to do better to improve their standing on the leader board</td>
</tr>
<tr>
<td>There was resentment towards those higher up the leader board</td>
</tr>
<tr>
<td>When rankings emerged it made some want to work harder to catch up, but disengaged others</td>
</tr>
<tr>
<td>Gave some a better sense of self-worth with regards to their contribution to the team, even if they had felt that they had to prioritise other responsibilities in the meantime.</td>
</tr>
<tr>
<td>People at top felt great and wanted to continue with performance</td>
</tr>
<tr>
<td>All wanted an understanding of how they could earn the points to beat those at the top.</td>
</tr>
<tr>
<td>For the gamifyer there was a lot of set up and management time. If it were seen that regular updates were not being given then people would get annoyed.</td>
</tr>
</tbody>
</table>
As the Gamified system progressed it was realised that some badges were really just made up to sound good, with little or no real measurement / points claim. These fell by the wayside.

<table>
<thead>
<tr>
<th>Complexity</th>
<th>Failure</th>
<th>Management</th>
<th>Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start small, don’t try to implement things unless they have been well thought through and discussed. Discover what motivates individuals and try and build badges around your team.</td>
<td>Once the management loses interest then the whole system is lost. Attempt to create goals/badges that every single person can attain, this will maintain buy in.</td>
<td></td>
</tr>
</tbody>
</table>

**Gamification Good Practice Study**

During the course of the study, the TVB Study Tour Team spoke to numerous Good Practice Experts. We did this in order to gauge and understand their opinion and personal experience on how to successfully deploy Gamification, with the aim of making the experience as engaging as possible.  

This ‘Good Practice Expert Study’ section of the report analyses the proven approaches to Gamification, and looks at the contradictory opinions that do crop up. Case studies underlining common obstacles and proven successful approaches will be introduced.

**Needs**

Good Practice Experts were unanimous about one need in Gamification – the user base must participate voluntarily. Free will and fun should motivate a user to participate; something that is often missing in imposed tasks.  

Once users are intrigued and engage in the Gamification initiative, the concept can be developed to include an execution of daily tasks, such as spreadsheet maintenance, documentation review or other more mundane and mandraulic tasks.

To be effective, Gamification concepts need to be designed around the institution’s identity and vision. The user experience should be defined in

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22 (Deterding, 2011)
very specific terms and should align with the goals of the institution. The institution needs to define what impact it is looking for, what methods can be used to reach their audiences and how to adapt the whole system to their image and brand. These objectives can then be achieved through the careful design of the Gamification system.

Two types of rewards can be used: intrinsic or extrinsic. Every expert consulted highlighted the need for intrinsic rewards – intangible rewards, such as a sense of achievement, an increased social value, or other rewards that bring personal meaning to the user. Extrinsic rewards form the tangible rewards of the Gamification system; such as simple points, badges or money. By combining intrinsic and extrinsic rewards different levels of rewards and achievement can be created, but experience dictates that it is the intrinsic rewards that maintain user satisfaction and thus long term usage.

Two aspects of intrinsic rewards are frequently recommended: social linking within a community and participation in a mastery cycle. Being part of a community fulfils several basic desires such as supporting other people, sharing of knowledge, building a network, participating as part of a team and may add some element of competition when leader boards are deployed.

Competition within Gamification needs to be carefully calibrated to the target audience. The competitive element of the deployment needs to be based on meaningful achievements. The level of competition can be managed so that competition remains a factor and not the driving factor in the deployment – people can compete against others, as well as against themselves, by trying to beat their previous achievements. Competing against others enhances a feeling of community. As well as the social element, Gannon 23 and Kapp 24 have found that users will work harder to become masters in their field, increase their knowledge and competency level for the intrinsic reward of mastery along, rather than receiving monetary rewards or badges. By deploying a competitive element in this way, both users that are of a competitive nature and those of a more introverted nature can be targeted. 25

23 Gannon (2012b)
24 Kapp (2012)
25 Herger 2012
A Gamification tool designed to encourage mastery of skill needs to be carefully thought out and monitored. Simplistically a system aimed at mastery of a set of skills is designed with a variety of levels increasing in difficulty. However, if tasks are too easy, the result is boredom; if they are too difficult, the result is anxiety. 26 Levels increasing in difficulty keep users interested in the long term. If a Gamification designer wishes to engage a new audience with varied ability scale they should design the system to allow for users to choose their starting difficulty level. This gives users a sense of empowerment by allowing them to set their own pace and improves levels of engagement and long term participation in the Gamification.

Good Practice Experts suggest that providing a storyline as a guiding thread 27 has been proven to increase user interest. This storyline could be illustrated with a social figure, an iconic drawing or animated person. Whilst data suggests that retention rates are decided by the meaningfulness of the tasks and rewards, activities can be enhanced by adding an entertaining backdrop, which can help to increase engagement and user return rates. 28

Finally, involving users in a feedback loop is essential to successful Gamification. Two forms of feedback are commonly recommended:

- **Meaningful feedback given to the user on his achievements:**
  - Guiding the user through a mastery cycle and helping them improve their performance
- **User feedback given to the Gamification developers:**
  - Direct feedback – through listening and engagement channels
  - Indirect Feedback – through analysis of data gathered from the Gamification instance deployed

Retention rates can only be kept high by understanding users’ reasons for satisfaction or dissatisfaction and using them to improve the Gamification system. Gathering feedback should be done from voluntary sources as unsolicited requests for feedback can disengage or repel users. An example is the numerous websites that repel users by automatically sending newsletters and demanding feedback before being able to unsubscribe.

26 (Csikszentmihalgi, cited in Deterding, 2011).
27 (Kapp, 2012)
28 (Sampanther, 2012).
Threats

Any Gamification system can be threatened by several elements which need to be carefully considered during deployment and development.

The first is that no boring task can become fundamentally interesting through Gamification. Whilst gamifying can enhance the engagement of users executing a task, it needs to contain an element of interest before it can be gamified. Similarly, Gamification cannot enhance a behaviour that does not already exist in the organisation. Users must be performing the behaviour and/or tasks voluntarily in order for a gamified version of the task/behaviour to be successful. 29

Whilst most games have an ending, a Gamification instance needs to develop over time. By using data and user feedback to develop the system, you can avoid the pitfall of boredom or repetitiveness that some Good Practice Experts warn may disengage your users from the system. 30 Adapting the system to include new levels or different facets can re-engage users and allow the system to work for the company.

Competition can work motivationally, but can also act counterproductively, creating hostility and jealousy. To maximise the motivational potential of competition, Good Practice Experts recommend designing a system that rewards teamwork and associated behaviours, despite the contradiction with individually awarded points. Encouraging competition with competitor teams or other external elements is an effective way of rewarding teamwork.

Leader boards used with too much emphasis on competition between users can lead to the pitfall of disenchantment. This can be avoided by awarding badges for reaching a certain competency level, much like a military badge or one awarded in the Scout movement. Another way of avoiding this is using the data generated by the Gamification instance to create several leader boards, each showing a different facet of mastery. Alternatively, your target audience may respond better to competition with their previous achievements rather than between the entire user group.

29 Herger 2012
30 De Hemptinne 2012; Herger 2012
All Good Practice Experts refer to the potential for unintended consequences of the behaviours that are being gamified. When structures are put in place it is natural for people to search for short-cuts, loopholes or ways to play the system. A good example of this is the monetary incentivisation of baggage handlers at an airport to deliver the first bag to the baggage hall as soon as possible. After monitoring the system, and seeing several carousels with a lonesome bag for several tens of minutes, the airport in question began incentivising for the quickest time for the last bag to the baggage hall. It is therefore prudent to monitor the Gamification instance once deployed and being open to amend it according to the feedback you get.

**Contradictions**

From the pitfalls and needs of a Gamified system detailed above you can see why experts recommend monitoring and controlling a system. However, whilst some experts promote a fully transparent system to prevent mistrust and provide clear guidance with regards towards expected behaviours, other experts highlight that putting a system in place contradicts the basic tenet of voluntary participation. There is a risk that if all tasks and associated expected behaviours are clearly communicated to users, users might perceive it as a set task that is imposed on them. They therefore might perceive that they have less autonomy than they original thought – this could limit the development of any innovative and progressive behaviour.

Although no panacea has been found, a way around this potential contradiction is a semi-transparent system where the mechanics are transparent, but the form of the reward may not be. This has been called 'controlled autonomy' and can be offered in the form of rewards that the user receives 'unexpectedly' after proving mastery of desired behaviours or achieving certain tasks.

When implementing a Gamification system, there are some that insist that the system needs to be deployed from the bottom up to ensure grass roots support, whereas others regard management buy-in essential before grass-roots users are targeted with the new system. Whilst the management has the power to implement a large programme, a

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31 (de Hemptinne, 2012; Herger, 2012a)
32 (Deterding, 2011)
management decision could put off potential users and participation may be directed rather than a user’s autonomous choice. The bottom-up approach seems to be preferred in entrepreneurial or viral environments such as social networks or innovation development instances, which are fed by the users. Large organisations, on the other hand, seem to favour a top-down approach. The approach is therefore determined by who deploys Gamification within an organisation and what their aim is.

**Successes**

This section highlights some Gamification successes and some reasons why they were successful.

The intangible effects of Gamification, such as motivation across the users, higher work quality and increased productivity, have been noted by the majority of the experts.  

Implementation times range between two months and two years until full user take-up. Most Good Practice Experts highlight the benefits that Gamification can bring in monitoring staff performance - time managers spend time monitoring their staff, whilst the Gamification platform also monitors staff and can collect data automatically. Although some examples we have seen use an internal resource to manage their Gamification instance, others outsource both the concept and the development. Budgets can vary greatly for implementation and need not be large - the price can vary according to the capacities desired for the platform.

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34 (Elhassian/ Bunchball, 2012)
Gamification Case Studies in Project Environments

This section picks out examples of specific project management applications, and presents them at a summary level. All of the examples are covered in greater detail in the Good Practice Expert Raw Data Appendix E.

**giffgaff**

giffgaff is a UK mobile phone network that operates a mobile virtual network, using O2’s infrastructure and invites the services users to participate in some aspects of its operation, such as sales, marketing and customer service. Users participating in the company’s operation are rewarded through ‘Payback’ remuneration.

giffgaff is a young, entrepreneurial company with a dynamic atmosphere and spectacular growth curve. The community is engaged in projects that develop concepts spawned from the ideas board, including:

- Re-launching their knowledge base
- Customers get payback and kudos points for involvement in projects
- Development of the “route master” - a road map of projects that is shared visually with staff and customers
- Managing giffgaff’s re-branding as a project with the community as stakeholders
- Building the brand values within the company

The “route master” provides a visual picture/leader board for the office, showing how projects contribute to the company strategy and vision, prioritising ideas and futures projects as well as tracking projects through to completion via magnets on the wall.

**Busification**

Busification was launched in late 2012 and brings a connected Gamification platform to several project oriented companies in South East Asia.

Busification unites all technology platforms within an organisation to provide a project management tool that allows users within that project...
or organisation keep track of personal and project progress regardless of where they are or what technology they are using. The easy access to up to date data has been found to improve stakeholder communications and also provide business analytics for organisational managers.

Companies that use Busification reside in dynamic industries where projects are fast moving, not necessarily in traditional project fields.  

**CapGemini**

CapGemini are a consultancy firm who designs Gamification platforms for clients. In one instance, they were requested to engage employees in an arduous field research process that relied on all steps being completed.

The Utility company found that the field research process was completed more thoroughly following the implementation of the Gamification of the field research process.

**Bunchball**

Bunchball sees Gamification aligning with ‘classic’ projects, at the junction between measuring actions and encouraging behaviours such as completion of actions, keeping to time and visually displaying data in a way that communicates current status accurately.

Bunchball offers an out of the box deployable platform that allows a do-it-yourself approach to Gamification. With two products you can scales according to the needs of your organisation. Powerful analytics allow visibility of personal performance and clients such as Salesforce.com have found it useful to improve sales staff performance. Nitro can be used as both as an internal project team tool, or external facing as a stakeholder management tool for the benefit of the project team.

**Cranfield University**

Cranfield uses Gamification in a complex, highly interactive project simulation to improve project professionals’ performance in a protective environment that allows them to subsequently analyse their performance.

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Participants have to not only manage project planning and control, but also manage stakeholders. Project simulations that can be used include managing a mining project in South America, building a football stadium in the UK and merging of two banks.

The simulation allows you to earn virtual money and performance management extends to losing your job due to non-performance. The simulations force users to work under the pressure of unforeseen events and manage project under high levels of stress. Most students learn from the opportunity to try and commit errors in a simulated/safe environment.

The Cranfield simulation and use of Gamification creates an instant appreciation of the complexity of projects, and human interaction. The feedback that is generated allows participants to modify their behaviour and their actions back in the real-time world, but it is easy to make the jump to see how the same data and feedback could help in a classic project in a live environment.

**SAP**
Business software maker SAP uses gamification in a large online community of SAP professionals.

When a customer or partner asks a question on the SAP Community Network (SCN), both SAP employees and SAP experts can provide answers and guidance. The member who posted the original question can then reward other members for their answers based on how useful the response was for the member. Also for blogging and editing wiki-documents such as FAQs members can accrue more points.

These points indicate a member’s competence with the technology and these have even taken off outside the SCN as a professional rating, particularly for independent consultants. For some members this has lead to more and more interesting projects or jobs.

**Organisational Case Studies**

**UK Department for Work and Pension**
The Department for Work and Pension (DWP) invested just over £100,000 to set up their own gamification system to develop internal
innovations. Over £20m benefit was generated by successful ideas developed through the platform within their first year of operation.  

The DWP platform encourages the development of internal innovations through a stock exchange system with a virtual currency. Users propose their ideas on the platform and ‘shares’ can be bought by fellow employees if they judge the idea to have a high potential. The platform encourages the sharing of ideas, and it ensures the quality of content by giving credit to marketable ideas.

Team work is promoted within the platform by using online problem solving between users sharing ideas and solutions to develop the ideas. This creates a sense of community, and drives user engagement.

The DWP believes that this tool has created a significant return in investment within its first year through the implementation of creative ideas and has created a more stimulating environment to work in, as well as unlocking undiscovered potential.

‘Props to You’
‘Props to You’ is a Gamification solution that engages managers rather than employees.

Every manager has a portfolio with their staff listed, each of them with a standard point allocation to begin. The number increases when any of the manager’s staff complete trainings or courses, receive promotions and change departments within the company. ‘Props to You’ aims to encourage supportive and effective management behaviours.

By encouraging changing of departments, which is traditionally discouraged, the manager can affect the company’s retention rates and allow the staff member to widen their skill base, as well as discover a position best suited to their skills. This model encourages managers to promote their employee's skills and ambitions instead on focusing on their own.

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36 (Cotterill, 2012)
37 (Cotterill, 2012)
**Khan Academy**

Gamification also can be used effectively education. When Khan created and posted on-line videos teaching physics for his cousin, he did not expect the acclaim he received, or to reach a worldwide audience, including disabled children with learning difficulties. Khan developed the initial videos into a Gamification learning environment that allows each student to develop at their own pace and has deployed it in his Los Altos school. He aims to expand this system to a point where pupils across the world would support and tutor each-other, creating a more social learning environment despite the distance.

The Gamification platform uses videos, participative exercises and reading material content. Lessons are made accessible only when the student has conquered the difficulty level below, and exercises are only considered complete and mastered if answered ten times in a row correctly. This ensures a command of the lesson content, before allowing progression to the next level.

Khan’s Academy does still use human interaction between teacher and pupil. The teacher's role has developed into a coaching role, supporting students individually in completing exercises – this has created a strong teacher-pupil interaction despite the online nature of the learning experience.

So Khan gives users from every background the opportunity to learn, each student goes at their own pace, shy adults are no longer confronted with younger, speedier ‘competition’ in class and children with different attendance patterns or short attention spans can be accommodated.

The platform records specific data on each pupil, such as the number of times videos or exercises have been repeated, the number of attempts at exercises, specific moments of the lessons replayed etc. This gives the teachers an extensive knowledge on the specific support each pupil might require.

Feedback data is also available to all pupils, encouraging them to tutor each-other on categories where their strengths might be complementary. Badges and leader boards have been added to the tool.

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38 Khan (2011)
as part of a recent development and have been found to be key in directing students towards areas where they can find help within the rest of the community.

This programme shows facets that can be adapted to a workplace environment, such as the targeted display of data to different audiences to accelerate their learning experience.

**Jon Guerrera**

Gamification can be successfully applied on a personal motivation level: In his talk “Gamifying yourself – A Team of One” 39 Guerrera explains how he awards himself points for reaching small targets such as finishing ten-minute slots of work, which, in turn, represent small and manageable efforts towards larger goals such as publications. After accumulating enough points, which he notes on post-its for easy and visible tracking, he buys himself a gift corresponding to a value-point ratio that he defined at the start.

He suggests that engagement can be increased by including others in order to create both accountability and competition. This system relies on visible and achievable targets pinned out on a route towards a goal. Guerrera believes that rewarding himself extrinsically with a tangible reward, adds to the personal satisfaction and intrinsic reward of completing his work to provide a successful approach to overcoming productivity problems or creating new habits. It is this individualistic method of Gamification that could indeed be employed within a project environment in a much more informal manner.

**Failures**

Several companies have tried to use the promising and upcoming trend of Gamification, and have been unsuccessful in one way or another. This part of the report looks at Gamification failures, and looks at the reasons that Gamification did not work.

**Organisational Case Studies**

**Foursquare**

Foursquare is a Gamification product that has seen moderate success.

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39 Guerrera (2012)
The principle is an app on smartphones where you “check-in” when you are at a location, telling all other users that you are there. Points are awarded for each ‘check-in’ and the more you check into locations, the more badges you are likely to win.  

Developments were made regularly to maintain user base engagement, including commenting on the quality of the locations and recommendation tools, but it was insufficient to prevent a widespread user fatigue, that was even recognised by foursquare's CEO. Users simply stop “checking in” after the novelty wears off.

Several factors have been found to drive the user attrition:

- A lack of control over unintended consequences or cheating:
  - Locations can be added several times over;
  - Checking in is possible from a 2km radius which allows for users to check in without visiting the places
    - Potential threat of robbery due to the announcement of residents not being at home
- No intrinsic rewards: the only rewards to be obtained are discounts in a very limited amount of locations or badges
- Social leaks were under weak control:
  - Information leaks directly when connected to social networks such as Twitter or Facebook
- User restriction as the tool is available only to smartphone owners

**Tumblr**

tumblr is a blog site on which anyone could begin a discussion on any topic; points are given for each post to increase the traffic on the website. These are displayed in a leader board called “tumblarity”. However, no system had been implemented to control the categorisation or even content, leaving the door open for serial posting or even inappropriate content. The only 'improvement' realised is a rating of the posters according to their popularity, which still does not appear to control the validity of the post contents adequately.

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40 (foursquare, 2012)
41 (Wired, 2012)
42 (Performance Marketing Insider, 2012 and Sullivan, 2010)
43 (Porter, 2010)
44 (McCarthy, 2010)
45 (McGary, 2010)
46 (Cashmore, 2009)
tumblr. can be defined as a definitive failure if defined by the sheer number of online critics, including the Tumblarity Sucks website (2009).

**Good Practice Expert Conclusion**

Good practice Experts agree on some fundamental rules for a successful implementation of Gamification: user participation should be voluntary, the system should be adapted to that organisation, intrinsic rewards such as social linking and true mastery should be present, feedback from users and data generated from the platform should be used to improve the platform, as well as deploying a variety of levels increasing in difficulty.

Good Practice Experts suggest that most common pitfalls are:

- Tools not fitted to users
- Lack of cheat-proof concept
- Lack of monitoring
- Restricted usability
- Absence of intrinsic meaning and rewards
- Social impact not accounted for
- No increasing challenge and lack of community

Experts also warn about key threats to this success: expectations of Gamification as a solution to all fundamental issues, misconception of the system according to the planned timeframe, uncontrolled competition and cheating openings.

Although there is no perfect solution when implementing a Gamification system, these case studies suggest pitfalls that can be avoided and that successful Gamification lies in a carefully planned and deployed instance, adapted according to the feedback received from users.
Gamification against APM BoK Sections

In order to gain a better understanding of the way that Gamification works, and how it can be applied to Project Management, it is necessary to understand how Gamification interacts with Project Management competencies. In the table displayed below Gamification application and interaction is described against each section from the APM Body of Knowledge (BoK) 6th edition. This is done specifically with the intention of explaining the wide coverage area for the Gamification method. Successful Gamification does not rely on an understanding of the project competency areas to which it could be applied, however it may give you a better chance of creating a working Gamified system and certainly give an idea of the different ways that the system can be implemented.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>How could Gamification apply to APM BoK 6th edition sections?</th>
<th>Case Study Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Governance</td>
<td>‘Tasks’ are defined &amp; allocated, and the use of Gamification tools allows for planning, scheduling, managing and motivating the project team</td>
<td>Rypple/work.com - Work.com allows PMs to align employee tasks with management expectations, and to showcase and reward those who achieve their tasks in a timely fashion</td>
</tr>
<tr>
<td>1.1.1</td>
<td>Project Management</td>
<td>Allows control of multiple projects, and statistical analysis over multiple platforms</td>
<td>Redcritter tracker, allows management of multiple complex projects and statistics over multiple platforms</td>
</tr>
<tr>
<td>1.1.2</td>
<td>Programme Management</td>
<td>Statistics allow overall business information to be produced, and areas of underperformance to be detected</td>
<td>Intrinsic part of Gamification concept, present in majority of commercial and private Gamification platforms. (Redcritter, work.com, Bunchball)</td>
</tr>
<tr>
<td>1.1.3</td>
<td>Portfolio Management</td>
<td>Infrastructure can be monitored and audited using gamified platforms</td>
<td>Taapi, a social game for mobile interfaces that seeks to turn energy conservation into more than just a proverbial game and change the world. Taapi will connect users across the interface to turn on/off lights and reward points</td>
</tr>
<tr>
<td>1.1.4</td>
<td>Infrastructure</td>
<td>Sustained growth of knowledge databases such as 'wikis’ can be engendered using Gamification platforms</td>
<td>FedEx is banking on Gamification to motivate its 300000 employees to share knowledge on its new social collaboration platform</td>
</tr>
<tr>
<td>1.1.5</td>
<td>Knowledge Management</td>
<td>Tools can be customised for stages of the project life cycle to keep metrics and incentives relevant</td>
<td>Apperian has rolled out a new product life cycle management system allowing users to participate in apps, app rating, crowdsourcing and Gamification features</td>
</tr>
<tr>
<td>1.1.6</td>
<td>Life Cycle</td>
<td>Allows clear goals and success factors to be set and measured to completion</td>
<td>Intrinsic part of Gamification concept, present in majority of commercial and private Gamification platforms. (Bunchball Nitro with Salesforce.com)</td>
</tr>
<tr>
<td>1.2 Setting</td>
<td>How could Gamification Apply?</td>
<td>Case Study Examples</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>1.2.1 Environment</td>
<td>Simulating business environments in a gamified manner can improve the understanding of the environment. This also allows modelling of potential effects of changes by employees and employers alike in a 'safe' manner</td>
<td>Several Gamification companies are now offering bespoke Gamification platforms tailored to reflect the business environment they operate in (Deloitte, gamify.com)</td>
<td></td>
</tr>
<tr>
<td>1.2.2 Operations Management</td>
<td>Operational models can be simulated with process improvement suggestions being facilitated and also rewarded according to the quality of the suggestion</td>
<td>Pharmaceutical company Omnicare, which uses IT management cloud service ServiceNow, introduced Gamification to improve its IT Service Desk operating model</td>
<td></td>
</tr>
<tr>
<td>1.2.3 Strategic Management</td>
<td>Strategic suggestions can be rewarded and a 'sandpit' environment can be provided to ensure that strategy is aligned with both employee and employers expectations and desired outcomes</td>
<td>Ant’s Eye View is a strategic management consulting firm for social enterprise partnered with Badgeville to deliver enterprise-class Gamification and social reputation programmes across customer, developer, partner and employee communities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 People</th>
<th>How could Gamification Apply?</th>
<th>Case Study Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Interpersonal Skills</td>
<td>Clear project objectives and goals given. Information available for all as to project performance. Instant feedback available to employees and management</td>
<td>Snapcomms.com uses Gamification to reinforce employee-management communication. Desktop quizzes are an effective way to strengthen important organisational messages as well as expand and assess employee skills and learning capabilities. Conveniently, SnapComms includes additional features designed to further engage employee participation</td>
</tr>
<tr>
<td>2.1.1 Communication</td>
<td>Assists in reducing conflict through the introduction of clear and concise goals. Rewards are transparent, and therefore rewards can be seen to be given for good performance. These aspects will reduce the instigation of conflict</td>
<td>Aqua Republica is an online strategic game that taps into social networks and the phenomenon of serious games. It helps raise awareness and educate stakeholders of the importance and challenges of managing limited natural resources in the face of multiple and often competing demands in the drive towards sustainable development and climate change adaptation</td>
</tr>
<tr>
<td>2.1.2 Conflict Management</td>
<td>Allows effective delegation due to inherent necessity of creating measurable items of work for Gamification to be meaningful</td>
<td>Intrinsic part of Gamification concept, present in majority of commercial and private Gamification platforms (Bunchball Nitro with Salesforce.com)</td>
</tr>
<tr>
<td>2.1.3 Delegation</td>
<td>Insipid effect of Gamification making work fun</td>
<td>Intrinsic part of Gamification concept, present in majority of commercial and private Gamification platforms (Bunchball Nitro with Salesforce.com)</td>
</tr>
</tbody>
</table>
### Gamification

#### 2.1.5 Leadership
Gamification allows project visions to be communicated, and helps project team alignment through incentives.

Deloitte Leadership Academy, an innovative digital executive training programmes for more than 10,000 senior executives at over 150 companies around the world, added Badgeville’s Gamification and reputation solution to reward participation, lesson progression, and to certify program completion with an optional diploma.

Deloitte Leadership Academy delivers lessons and insight from some of the world’s best known business schools, such as Harvard Business Publishing and IMD, and global leaders in an easy to consume format via their online portal, newsletter, and mobile access. Badgeville’s dynamic behaviour management technology enables Deloitte to measure, surface and reward engagement across this online education platform.

#### 2.1.6 Negotiation
Negotiation skills can be practiced and effective methods rewarded and reinforced.

SAP Roadwarrior is a sales negotiation simulation that supports SAP sales representatives by putting sales reps into a simulated sales negotiation with a fictitious customer and answering questions.

#### 2.1.7 Teamwork
Increases team motivation, and encourages competition between members / other teams. Single aligned vision for the project help team to join forces.

NextJump included Gamification into their employee gym program. Now their employees could form regionally based teams, check-in to workouts, and chart their team’s progress on a leader-board. This had a powerful effect on creating and sustaining a positive behavioural change. With Gamification, 70% of NextJump’s employees now regularly work out.

### 2.2 Professionalism
#### 2.2.1 Communities of practice
Communities can be formed using the communication tools available within the Gamification platform, effective co-operation, delegation and professional development can occur within these structured fostering environments.

Badgeville has announced a new effort to bring its engagement-fostering Gamification service to Drupal communities that want to reward their users for quality participation.

#### 2.2.2 Competence
Competence taught and reinforced through the medium of Gamification.

designingdigitally.com offers competency focussed bespoke Gamification platforms, arguing highly engaging online training results in better retention and mastery of the concepts the training is designed to provide.

#### 2.2.3 Ethics Framework
Ethical understanding and frameworks can be taught and reinforced through the medium of Gamification.

designingdigitally.com offers ethically focussed bespoke Gamification platforms.

#### 2.2.4 Learning and Development
Helps people to build their own personal profiles, and incentivises them to make up the training to fill competency gaps.

Marriott International Inc. & Deloitte Leadership Academy use proprietary Gamification platforms to train and maintain standards amongst staff.

### 3 Delivery
#### 3.1 Integrative Management

<table>
<thead>
<tr>
<th>How could Gamification Apply?</th>
<th>Case Study Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business cases can be created collaboratively, encouraging innovation and creativity, as well as reducing individual workloads. Also can improve stakeholder buy in due to investment in process of preparation</td>
<td>Recritter.com allows collaborative approached to planning, and arguably business case formulation as well</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Control</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Information Management</td>
</tr>
<tr>
<td>3.1.4</td>
<td>Organisation</td>
</tr>
<tr>
<td>3.1.5</td>
<td>Planning</td>
</tr>
<tr>
<td>3.1.6</td>
<td>Stakeholder Management</td>
</tr>
</tbody>
</table>

### 3.2 Scope Management

#### 3.2.1 Benefits Management
- The centralised nature of Gamification platforms enables all forms of scope management to be effectively controlled and disseminated
- Redcritter tracker, allows management of multiple complex projects and statistics over multiple platforms

#### 3.2.2 Change Control

#### 3.2.3 Configuration Management

#### 3.2.4 Change Management

#### 3.2.5 Requirements Management

#### 3.2.6 Solutions Development

### 3.3 Schedule Management

#### 3.3.1 Resource Scheduling
- Gamified employer/employee dashboard allows effective scheduling of labour and material resourcing
- Work.com, allows management of multiple complex projects and statistics over multiple platforms
| 3.3.2 | Time Scheduling | Gamified employer/employee dashboard allows effective scheduling of time across project. | Rypple/work.com - Work.com allows PMs to align employee tasks with management expectations, and to showcase and reward those who achieve their tasks in a timely fashion |
| 3.4 | Financial and cost Management | **How could Gamification Apply?**<br>**Case Study Examples** |
| 3.4.1 | Budgeting and cost control | Metricated approach to gamified representation of current performance versus budget allows a greater understanding of how individual team contributions affect budget levels within the project. Potentially allowing step improvements in spending behaviour (reduction, reliability, smoothing spending/cash flow) | In 2012 the Canadian city of Montréal invites its citizens for the second time to work on the city’s budget through their budget simulator. Different revenue and expense categories are listed and can be reduced or increased by slider controls. From waste collection, parking fees, libraries and culture, public pools, citizens can play with the figures to reach a balanced budget – and propose it to the city. The city administration pledges to consider these suggestions |
| 3.4.2 | Funding | Allows greater understanding of under/over funding of areas of project. Potential to highlight issues long before they arise | Several Gamification companies are now offering bespoke Gamification platforms tailored to reflect the business environment they operate in (Deloitte, gamify.com). Allows the use of budget and funding models to extrapolate future issues and create mitigation strategies |
| 3.4.3 | Investment appraisal | Metricated approach to gamified representation of current performance versus budget allows a greater understanding of how viable a business is for return on investment | Several Gamification companies are now offering bespoke Gamification platforms tailored to reflect the business environment they operate in (Deloitte, gamify.com). Allows the use of investment models to extrapolate future ROIs and create investment strategies |
| 3.5 | Risk Management | Incentivising can be used to assist project team members to focus on risk mitigations, and improve their risk collection process | Intrinsic part of Gamification concept, present in the majority of commercial and private Gamification platforms. (Redcritter, work.com, Bunchball) |
| 3.5.1 | Risk Context | Simulating business environments in a gamified manner can improve the contextual understanding of these risks amongst a PMO team | TrueOffice has created a gamified risk management tool and mobile phone application |
| 3.5.2 | Risk Techniques | Differing techniques for risk reduction and mitigation can be compared using gamified metrics, improvement suggestions can be rewarded, improving emergent risk reactivity and helping innovate within the PMO | TrueOffice has created a gamified quality management tool and mobile phone application. Vodafone DE has created a gamified app that encourages customers to report areas of bad signal called “bufferbusters” |
| 3.6 | Quality Management | Incentivising can be used to increase importance of Quality activities, and overall quality of performance as directed | Intrinsic part of Gamification concept, present in the majority of commercial and private Gamification platforms. (Redcritter, work.com, Bunchball) |
| 3.6.1 | P3 Assurance | Gamification allows a metricated dashboard of relevant performance statistics allowing stakeholders to assess the current time, costs and scheduling of the project compared to the baseline |  |
| 3.6.2 | Reviews | Gamification can be used to encourage team members to perform regular quality reviews, competing to provide the most timely and pertinent assessments |  |

*Gamification | Gamification against APM BoK Sections*
### 3.7 Resource Management

Gamification can be used to allocate the correct team member to the appropriate task based on their profile.

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7.1 Contract</td>
<td>Through the implementation of a Gamified Profile, any member of an organisation can apply for and be selected for new job roles / projects based on their demonstrated badges, points or competencies. Rypple/Salesforce.com’s HR Gamification tool allows users to select from their organisation the employee that best fits the job.</td>
</tr>
<tr>
<td>3.7.2 Mobilisation</td>
<td>Measures of effective procurement can be gamified to encourage employees to undertake optimum procedure when procuring supplies for the project. Intrinsic part of Gamification concept, present in majority of commercial and private Gamification platforms. (Redcritter, work.com, Bunchball)</td>
</tr>
<tr>
<td>3.7.3 Procurement</td>
<td>Measures of effective procurement can be gamified to encourage employees to undertake optimum procedure when procuring supplies for the project.</td>
</tr>
<tr>
<td>3.7.4 Provider selection and management</td>
<td>Potential to gamify supplier’s profiles, allowing them to compete to provide the best quality service to the PM who can measure performance effectively. Mindtickle.com creates bespoke selection tools for enterprise.</td>
</tr>
</tbody>
</table>

### 4 Interfaces

#### How could Gamification Apply?

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Accounting</td>
<td>Gamification can be used to make learning and performing mundane tasks more exciting. Conventional game dynamics and increased end user interaction can be used to maintain higher attention and retention levels amongst students, as well as encouraging extra-curricular study. The Canadian game studio Rocketfuel Games launched in late 2012 an education game for teens and college students on – accounting. Yes, accounting. If you know teens at this age, you know that they’d rather sit through a lecture from their parents and grandparents telling them what they didn’t have when they were young and how spoiled the young generation is. Anything is better than studying accounting. That did not discourage the game studio. They took a new spin on it by creating a narrative on accounting. Instead of sober examples around some fictitious company, the accounting student works for a mob boss. Revenue from shakeups, bribes, alcohol money are tallied against expenses for guns, funerals, and other typical mob related activities. Here is where the fun motivator “Being a Villain” changes people’s interest in accounting.</td>
</tr>
<tr>
<td>4.2 Health and Safety</td>
<td>Incentivising can be used to increase importance of HSE activities, and overall quality of performance as directed. TrueOffice have created a gamified HSE management tool and mobile phone application.</td>
</tr>
<tr>
<td>4.3 Human resource management</td>
<td>Allows a business to recruit the correct people to its project teams, helps retain the right people, allows rewards when necessary and helps to develop and train people (particularly incentivises self-learning). PeopleFluent, a provider of talent management software, are building gaming tools and processes into their whole suite of products. The first called Talentwise challenges you to build a successful company through acquiring the right people, providing the right incentives etc. – think fantasy hockey for the business world.</td>
</tr>
<tr>
<td>Section</td>
<td>Domain</td>
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<tr>
<td>4.4</td>
<td>Law</td>
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<tr>
<td>4.5</td>
<td>Security</td>
</tr>
<tr>
<td>4.6</td>
<td>Sustainability</td>
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</tbody>
</table>
Pros & Cons of Gamification

The use of Gamification in the workplace should only be implemented after a careful consideration of the implications involved. Gamification within a working environment is hugely different to Gamification within a consumer, online or internet community situation. It is therefore necessary to understand the positives and negatives of the Gamification process. It is particularly important to realise that Gamification is not a solution in any case, but a tool to use that can have both positive and negative effects on the workforce.

Positives

- Gamification can increase employee productivity through their engagement with the method by 10-20%\(^\text{47}\)
- Gamification can improve the team ethic within project teams as it creates a spirit of fun and engagement. In the survey taken of the APM community 48% of people highlighted the benefit that the competition aspect can have on a project team (Figure 14 & Figure 15)
- Can increase quality of work, particularly if the deployed Gamification incentivises for quality of work
- Provides the project manager with a better and more timely understanding of the performance of their work

\(^{47}\) Herger (2012)
team, and indicates the areas where effort needs to be applied

- Data generated helps an organisation to understand fully the skills present within their organisation
- Data generated allows for more accurate selection of person to project team, dependent on skills required
- Increases the engagement & motivation of employees in a project or organisation. As discovered in the TVB survey, most people stated that they responded extremely well to competitive elements present within the workplace. When we asked participants what elements of competition they valued most in the workplace, a large quantity of people explained that it was the ability to drive and motivate the team which they thought was the best part of the competition (Figure 16 & Figure 17)
- The aggregated data on the performance of each employee will

![Figure 16 - TVB Survey - Do you Respond well to Competition?](image1)

![Figure 17 - TVB Survey - What Aspects of Competition are Beneficial?](image2)
make rewarding performance more transparent and fair 48

Negatives

- Where there are winners, there are also losers, careful consideration is needed to determine the effect that this will have on the team or organisation
- Some employees will react negatively to the issue of being measured so publicly. In the APM community survey a large proportion of people highlighted this as a key concern over the principles of Gamification (Figure 18)
- Some employees will react negatively to being ‘forced’ to take part in a competition
- The word ‘Gamification’ may alienate some people as it may not be an understood or trusted terminology
- There is a risk that trying to apply Gamification to every aspect of the workplace may cause a lack of focus and prevent interest in the engaging aspects that Gamification can provide. Results from the TVB survey suggest that although points could be applied to mundane aspects of work, a large proportion of people would not respond well to this, and may switch off from any attempted application (Figure 19).

• There is a danger that points and badges become less exclusive as time goes on, this leads to a lack of interest and the initiative peters out. Points and badges must remain lucrative, and every effort must be made to manage and maintain interest and challenge users.

• Gamification may de-value work, or create loss of focus if the behaviours enhanced are not well thought out and not aligned to desired work behaviours.

• In a competitive environment Gamification could cause destructive competition between employees; retention of information or sabotage of another’s work. In the survey taken of the APM community, 36% of people said that they had experienced competition having a destructive impact on a project (Figure 21). We also asked people why it wasn’t useful to have competition in the workplace (Figure 20), and what specifically proved to be destructive to the project team when competition was present in the workplace (Figure 22). The main issue that was a concern was over the fact that competition can go too far and become counter-
productive, creating divides between project stakeholders, and leading to individualistic oriented workplaces, not team oriented ones. This individualistic behaviour that can be created is explained in the famous philosophical examples of the prisoner’s dilemma, and the Tragedy of the Commons. To read about these two examples, details are contained within Appendix F.

![What Aspects of Competition can be Destructive?](image)

- Gamification may alienate older generations in the workplace who are unsure of the new terminology and dislike what they perceive to not be the ‘Queen’s English’

Clearly the issues identified here as ‘negatives’ of Gamification are only negatives if they are allowed to become so. Every effort should be made to mitigate and understand these issues before any Gamification implementation is tried. If these issues are not understood then an implementation of Gamification could be fatally flawed from the outset.
The Psychology of Gamification

Within the Project Management world there are already many different models to help us understand how people work. As managers of people, it is very important to have a good grasp on these and to understand the impact of your behaviors on the people that you work with. In understanding Gamification it is important that you understand how these psychological factors come into play, and how you can best use them. We have looked at a number of popular behavioral models and applied Gamification to them to try and understand the outcomes.

Psychological Models

An important aspect in the understanding of Gamification is a grasp on the elements of the psychology of Gamification and the ways that you can influence human behavior. An interesting model into the elements that need to be understood has been drawn up by R. Wang & Insider Associates (Figure 23) \(^{49}\). This details the seven deadly sins, and how Gamification can be used to manipulate these aspects to engage and produce behaviors from people.

The Seven Deadly Sins

Lust appeals to lack of self-control and attraction. Engage the user through intrigue. Find what attracts the user through incentives.

Gluttony refers to excess, over-consumption, and over-indulgence. Focus on the desire to accumulate, acquire, and contribute.

Greed calls on the desire for power, status, and wealth. Use non-monetary incentives such as immediate recognition to drive engagement. Provide scarcity in rewards.

Sloth attracts laziness, indifference, and complacency. Keep designing the system to be uber convenient for the user. Privacy falls aside when convenience wins out.

Wrath calls out anger, impatience, revenge, and rage. Draw on the desire for immediacy. Reward for rapidity.

Envy fuels a need to desire what others have. Highlight the success of others. Improve transparency on the spoils and rewards.

Pride draws out vanity and narcissism. Foster healthy competition. Incentivise the pursuit of excellence.

Understanding these seven deadly sins can help anyone trying to understand how to push the buttons of those people that they are trying to engage, and help in planning the deployment of Gamification.

But how does this link to classic behavioural studies such as Maslow’s hierarchy of needs, which is an understanding of the motivating factors that drive human behaviours?

Maslow

As Maslow’s hierarchy of needs shows, humans have a number of needs they aim to fulfill within their lives. Gamification concepts could be used to promote the top three levels.

Dan Pink, the author of ‘Drive: The Surprising Truth About What Motivates Us’ correlates the hierarchy of

![Figure 2: Maslow & Gamification](image)
needs with the basic principles of Gamification (Figure 24). He explains that the deficiency needs in Maslow’s model are satisfied by a long term interaction with the Gamification method, where people can attain status, social cohesion and reputation. The reason that Gamification is so successful however is in the rewards provided from the self-actualisation pinnacle of the Maslow model, is through the challenges, quests, points, and path to mastery that are provided by Gamification. By all playing the same “game”, social cohesion is created. By using small rewards and feedback, self-esteem and feelings of achievement are promoted through challenge and problem solving.

In the APM Community survey, people were asked to describe their own

![What factors affect your own motivation?](image)

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Relevance of work/interest/feeling valued/variety/development opp/challenge</td>
<td>40%</td>
</tr>
<tr>
<td>Responsibility/freedom to make decisions</td>
<td>35%</td>
</tr>
<tr>
<td>Trusting atmosphere/lack of micro mgmt/respectful/no blame/collaborative approach</td>
<td>25%</td>
</tr>
<tr>
<td>Positive thinking team/good teamwork</td>
<td>20%</td>
</tr>
<tr>
<td>Flexible working hours/good office environ, work/life balance</td>
<td>15%</td>
</tr>
<tr>
<td>Clear targets with reviews allows you to commit &amp; demonstrate when met, everyone working towards same goal/achievable/KPIs</td>
<td>10%</td>
</tr>
<tr>
<td>Recognition/acknowledgement of own effort/thanks</td>
<td>5%</td>
</tr>
<tr>
<td>Rewards</td>
<td>5%</td>
</tr>
<tr>
<td>Achievement/success</td>
<td>5%</td>
</tr>
<tr>
<td>Good/negotiable leadership/spONSOR/support/Recognition of importance/transparence</td>
<td>5%</td>
</tr>
<tr>
<td>Listening &amp; taking own ideas</td>
<td>5%</td>
</tr>
</tbody>
</table>

personal motivating factors. It is interesting to note that the majority of motivating factors for people fell within the need for esteem and self-actualisation, which relates back to the joint model as described by Maslow & Pink. This suggests that the use of Gamification could indeed provide the motivation factors necessary to engage the community surveyed and would be deployable within the project management community.

Reinforcement Vs. Punishment

Gamification can be related to other commonly understood behavioural models. In B.F. Skinners ‘Reinforcement Vs Punishment’ (Figure 26) model we can understand how reinforcement and punishment have roles within Gamification. It is an understanding of this and what Gamification offers under these contexts that can help to understand the methods that might be implemented when setting up a Gamified system. In particular how you could affect behaviours of the group that are being Gamified and the cause and effect of decisions that you might take within the Gamification implementation.

**Positive Reinforcement**

This is the addition of a positive stimulant with the aim of increasing a specific behaviour in a person.
Within the context of Gamification it is fairly evident that the giving out of points can be classed as a positive stimulant. If the Gamification model is set up to increase behaviour in a certain area, then almost certainly any activity that is a positive action within said area will be incentivised by points. Once a project team member recognises that the points are awarded within the specific area, behaviour will be driven towards that area in order to continue gaining points. This is how a project manager would enhance team behavioural characteristics.

**Negative Reinforcement**
Negative reinforcement is the removal of a positive stimulant such as praise or attention from a person in order to increase a specific behaviour.

This causes the person to wish to re-establish the positive stimulant that they previously had. In the case of Gamification this might be seen in the giving and taking of badges. If you have within your Gamification model a badge that can only be owned by one person at a time, for example an ‘Intellect of the Month’ badge, it is only natural that each team member will wish to claim back this badge when it is taken away from them.

**Presentation of Punishment**
This is the addition of a stimulus or punishment in order to decrease a certain behaviour.

In the case of Gamification, this might be the displaying of a leaderboard that shows the lesser performers. By adding this punishment, embarrassment is caused by the public display of poor performance, and this would initiate the change in behaviour as people try to bring themselves up the leaderboard. As with any punishment, administration has to be monitored carefully, as too much punishment can prove to be counter-productive and could disengage and demotivate, by breaking a person’s resolve to try at all.

**Removal through Punishment**
Removal through punishment relates to the decrease in certain behaviours that are brought about from the removal of a stimulus or punishment.
In the case of Gamification, it may be that a team member is performing extraneous tasks, or not following the direction of the project manager. Through the removal of points (changed incentives against tasks) or the removal of recognition for the offender then the team member’s behaviour can be altered as they realise that there are no longer points or rewards being offered to them. The removal of this recognition will cause the team member to re-evaluate the way in which they are working for the team in order to re-establish the supply of points and recognition that they had lost.

Unintentional behaviour changes

There is a risk in employing the Gamified system that either reinforcement or punishment can be inadvertently introduced to a team or individual.

The effects of this can in some cases be unintentionally detrimental to the success of the project or organisation. An example of this could be in the disenfranchisement of a section of the workforce who do not wish to operate within a Gamified system, or a loss of focus from the regular day job when Gamification activities take precedence. In the latter case, an employee’s focus could shift away from customer satisfaction, to the number of points that they are accumulating in a week. In which case, the whole principle of the business gets lost, by replacing work with a distraction. Usually the addition of these unintentional behaviours occurs when the Gamification deployment has not been adequately thought out, and all consequences anticipated.

Implications

To avoid these circumstances it is extremely important that the implications are understood before Gamification is implemented, and regular checkpoints are taken when prototyping to ensure that no unintentional behaviour changes have crept in.

Neural Activity

Whilst understanding the behaviours and expected responses of a person or team, it can also be important to gain an insight as to what is
going on within the brain that affects people’s behaviour and makes Gamification so stimulating.

There has been much study into the neural activity inside the brain when a person is undertaking exciting and addictive tasks. Whilst there has been no specific study into the impact of Gamification within the brain, it can be assumed that it is similar to that of both gaming, gambling and other competitive activities which release specific chemicals to create feelings of excitement, euphoria and pleasure. It has been hypothesised that Gamification aims to activate the brain’s natural reward system through the release of a chemical known as dopamine.

Dopamine has been linked to pathways within the brain responsible for both pleasure and motivation in stimulating and addictive activities. As part of the reward pathway, dopamine is manufactured in nerve cell bodies located within the ventral tegmental area (VTA) and is released in the nucleus accumbens and the prefrontal cortex (Figure 27). 52

When dopamine is released within the brain this gives the person a feeling of satisfaction and happiness. At an extreme this is the system which can produce euphoria in drug taking, and is also the system which can become maladaptive in addictive behaviour. Clearly the extreme case of serious addictive behaviour is not looking to be re-created in a Gamified system.

By tapping into a person’s neural system and rewarding the person, this activation should then fuel the motivation to continue, and therefore continue their addiction to the Gamified system. What we are looking to

52 http://en.wikipedia.org/wiki/Dopamine
realise is to create feelings of euphoria – however mild, in team members in order for them to become engaged in activity and generate good feeling surrounding their job through interaction with Gamification.
Gamification in Education

A useful gauge of the seriousness with which a subject is taken in the business environment can be understood by looking at the world of education. Investigation of the courses being run by international academic institutions into the subject of Gamification should show the seriousness and maturity of the concept of Gamification internationally.

University Level Education

At the time of completing this study, Gamification is already on the university syllabi and is being taught in two UK universities and one American University. In the UK, Birmingham City University (UCE) and Bournemouth University have available courses, and in the USA Wharton School, University of Pennsylvania also has courses.

The Birmingham University course, Social Media, Mobile Media and Gamification, is available as a module on the universities Masters course list. The course focuses on how these tools can be used within a business environment, to create profit and reach larger audiences.

The Bournemouth University course on its PhD Scholarship programme called Gamification of Tourism – “Augmented Reality Gaming: A New Paradigm for Tourist Experience?” The course focuses on how smart phone technologies allows a move from static information to timely-onsite information using fun games such as treasure hunts to enhance the tourist/user experience.

Wharton School, University of Pennsylvania teaches Gamification as part of its MBA programme. The course examines the mechanisms of Gamification and provides an understanding of its effective use. Course attendees have gone on to use Gamification successfully in business to motivate and engage staff.  

Other UK Universities, including the City of London and University of Huddersfield are running one off courses on Gamification.

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53 (de Hemptinne, 2012)
The City of London lecture on Gamification, Innovation and Transformation, was open to the public, and run by an innovation professional. The course is aimed at professionals looking to use Gamification to help problem solve, recognise patterns in collaboration, communication, productivity and improve performance.

The University of Huddersfield ran an online information conference on ‘Gamifying the University Library’. The university library uses Gamification within an online game based around use of library resources, called Lemon Tree. Lemon Tree links to the library record, and library users win points and badges by engaging in activities such as taking books out, leaving comments on books and borrowing other library resources. This creates a social environment, helps to improve the quality of information available to others on the library content and increases interest in books and the library within the university community.

**Other Gamified Organisations**

Stanford University School of Medicine has combined Gamification with healthcare by creating a program called Setris. Setris turns the management of septic patients into a game designed to teach a range of important points regarding the management and treatment of sepsis. The game is aimed at doctors, and uses interactive case scenarios in the form of game that is accessible from most mobiles and browsers. This example shows that Gamification has been appropriately employed to teach in safety critical environments, clearly benefiting those in the medical profession that have a necessity to learn correct treatment techniques.

The Gamification Research Network (GRN) is a communication hub for academic and industry researchers and students interested in studying the use of game elements in non-game contexts. The purpose of the GRN is to further research in the area by providing a repository of relevant people, projects, and publications, and by offering a shared space of discussion and publication. This demonstration of need for longevity of concept and community shows that Gamification is not intended as a flash in the pan. The plethora of information available
within this community shows that Gamification has a long term, international interest.

‘The Gamification Blog’ provides new research and commentary on Gamification. The blog runs events, workshops, provides a forum to connect with experts and links to new companies and technology providers.

**Gamification in Teaching Children**

Gamification is being employed in numerous schools across the world to motivate children by providing instantaneous feedback, creating a competitive atmosphere and rewarding progress no matter how small. Gamification works in the school environment because it is much easier to motivate children with something that seems like a game. In fact the concept of Gamification is one which in essence is familiar to the classroom environment. After all, children have gone that extra mile with effort or concentration for a ‘house point’ or a ‘gold star’. Several organisations have employed Gamification in order to improve the teaching of children, such as the Khan Academy, Karl Kaplan and Tim Vandenburg from the University of Hesperia, USA. For more information see the Good Practice Research Database in Appendix E.
The Future of Gamification

Although Gamification has been called a buzzword by some of its critics, elements of Gamification have been around for a long time including loyalty schemes and happy hours in bars and restaurants. According to a Stanford professor, also a writer of Gamification literature including a book called “The Gamification of Education”, Gamification of businesses and virtual worlds is creating an expectation among people that real-life interaction follows simple explainable mechanics, and as a result some disillusionment can occur when they do not.

Not everyone is a fan of Gamification as it provides an “easy” answer for a CEO to employ a games strategy to their existing products through simple, repeatable approaches. Some argue that it ticks a box for companies wanting to use a social media strategy, and in doing so they are exploiting their customer base with little regard to how it might ‘fit’.

Another criticism of Gamification is that it is just a ‘fad’. Some statistics show that Gamification usage in an organisation can drop over time. This can typically be due to poor Gamification deployment that tends to not allow users any increase in challenge or adaptation in difficulty levels. If the difficulty or challenge level does not increase people get bored and stop interacting with the Gamified system, causing it to fail. Unless organisations analyse data generated and adapt their Gamified systems, then they will fail, and the idea will fall out of use.

The majority of Gamification programmes currently focus on the end goal rather than the journey to get the end goal. Gamers traditionally find the most rewarding goal devising the strategy to achieve a goal, stop the opposing team or get around traps; not simply holding the medal/record (or badge) in your hand. Therefore, if Gamification is to continue to find a place in the modern workplace much careful thought needs to go into finding a way for people to experience some sort of narrative on their way to an end goal.

Gamification leaders Foursquare announced in June 2012, that it was moving away from the core Gamification features that once defined it, as it has been identified that its users no long check-in. This checking in process, when they visited certain locations in the country, was the
method by which people were able to earn points to compete against friends or colleagues in order to become the ‘Mayor’ of the physical area. The newly developed Foursquare 2.0 focuses on a social media application, recommendation engine and a deal service. This therefore raises questions as to whether the originators of Gamification now feel that the bubble has burst, and new methods of engagement need to be thought of. It may be that the Gamification concept is now evolving and needs to be monitored and shaped to suit future needs.

According to a 2011 Gartner Research Report it is estimated that by 2015, more than 50% of organisations, in the US, that manage innovation process will Gamify those processes. This is backed by companies such as Cisco, Oracle and SAP who are all reported to be developing Gamification to increase engagement. This endorsement from blue-chip companies suggests that perhaps there is more to learn from the early Gamification failures, and thorough investigation of the method will reap benefits later on once the effects are understood.

When Kris Duggan, Badgeville CEO, was interviewed about Gamification he said “the best Gamified experiences, whether designed to drive customer or employee behaviour, are deeply integrated across your brand’s online experience, not hidden in one section of your site or used in a short-term campaign. When you think of Gamification as a holistic, long-term experience that includes social rewards, reputation systems, and social experiences on your site, it is clearly not a fad, but a change in the way businesses think about driving user behaviour and reaching their key objectives defined by this behaviour.”

To ensure that Gamification is not just a trend companies need to ensure they are using well designed games. Just adding a game application does not guarantee fun and commitment. To make sure it’s fun, companies have to put some hard work into the game design, to have the right approach and dedication to improve almost any aspect of a business.

54 http://www.gartner.com/it/page.jsp?id=1629214
TVB Study Tour Gamification Best Practice Recommendations

Dos

- Align with your company vision, brand and tenets
- Integrate the Gamification into the look, brand and feel of your company
- Identify the key existing behaviours you wish to enhance or change
- Collect data and use it as feedback to improve your system
- Design the system to your company’s specific needs
- Provide data to users to allow them to analyse their own performance
- Keep it simple – the less clicks the better
- Make it enjoyable – users will buy it easily if it is fun
- Trial your system with the user group
- Make it optional and trust that you will attract users – having to use the system can have a negative effect on those who are not interested in taking part
- Ensure that the badge is worth earning through either social or professional recognition
- Ensure that points are worth earning through challenge
- Make it shareable – to entice sharing of information between users
- Contextualise the system – it makes it meaningful
- Be transparent about how the system works
- Look how you could break your system – to find out unintended consequences
- Periodically review your points system – users might lose interest if the top of the board seems unreachable.
Don’ts

- Trust that the system can look after itself – a system that is not adapted will lose users
- Go for really low tech systems – the technology is there to help you administer and adapt the system
- Assume that that it will take off by itself – you will need to work to sell the concept and system
- Use the term ‘Gamification’ with those organisational members that may have problems with the gaming concept – areas such as HR may respond better to phrasing such as ‘incentivisation’, ‘behavioural drive for motivation and engagement’
- Make the system inaccessible for people – ensure all users have appropriate access to the system through the right level of technology
- Increase admin – make sure that it either saves time or the enjoyment outweighs the clicks
- Alienate groups within the potential user base – identify what motivates them and work it into your model
- Reward undesirable behaviours – test system to look for loopholes
- Get disheartened – it can take up to two years
- Let the system get outdated – a good system is always improving
- Punish low performers
Study Tour Conclusion

The Thames Valley Branch Study Tour Group has spent a year researching the topic of Gamification. During that time we have read hundreds of articles, viewed numerous Gamification lectures and seminars and spoken first hand to many Gamification experts, consultants, researchers and creators. In this time period we feel that we have gained a comprehensive understanding of the theory, and the effect that you can have on human behaviour just through the introduction of a few simple statistics and rules. As project managers ourselves, this seems like a very exciting prospect. Surely our main interest point as project managers is in the understanding, interaction and manipulation of those human behaviours within our project teams in order to bring about the results that we wish to achieve.

We think that Gamification is a very interesting and useful tool; however the purpose of our study and this report has never been to promote the idea of Gamification, but instead to investigate and promote the application in project management. This is the reason that we have tried to provide a balanced understanding of the concept, and an understanding of the issues and impacts that may be created from its use.

If there was one key take away point from this report into Gamification it would be a recommendation to think very carefully about what behaviours you wish to manipulate, why you wish to do this, and how the Gamification tool can help you achieve this. Until the detail has been considered and thought has been given into the impact and reaction of the project team, then implementation of any form of Gamification should not be considered as the risk for team destabilisation and unintentional behaviour remains too great.

Gamification really can be a fantastic tool; used in the right hands and implemented in the right way many examples in the

![Are you aware of the term 'Gamification'?](image)
real world have shown that a Gamified team is a happier, more motivated and engaged team as described in the case studies in this report.

One of the TVB Study Tour Team’s primary objectives during this Study Tour was to increase the awareness of Gamification within the APM community. This was done through APM forum discussions, TVB newsletters and promotion at APM events. As the study closed we asked again the same two Gamification awareness questions that we asked at the beginning of the study tour. A large increase in awareness can be seen within the APM community, with roughly a 15-20% increase observed for both an awareness of the term Gamification (Figure 28) and the basic methodology behind the term (Figure 29). Given that this report had not been published, and a Gamification event was run by the study tour group after the survey was issued, this increase in awareness can be expected to rise further still from the initial survey (Figure 6 & Figure 7).

In addition to the increased awareness from the APM community, we asked people if they had been aware of our study (Figure 30), and what they had taken from it so far. In the main, the response was expected. The majority of people wished to learn more, and to see more specific examples which we hope this report will deliver. However some people have taken a basic level understanding into the concepts already, and were interested in how they could apply this to their own
projects, stating that they were very interested in the application of new approaches to people management on projects. This is exactly the type of response that the TVB study tour group were looking for, and will continue to try and communicate the Gamification concept and examples in the hope that other APM community members can benefit from some of the learning points that we have provided.
References

Burke, B. (2012) 'APM Interview'. Interview by Douglas Bezerra de Silva, 20 August.


de Hemptinne, R. (2012) 'APM Interview'. Interview by Fernande van Schelle, 3 August.


Herger, M. (2012a) 'APM Interview'. Interview by Scott Blunden and Fernande van Schelle, 13 August.


Bibliography


Appendix A – Study Tour Proposal

Invitation to Bid - APM Study Tour Award 2011-12

Proposal Details:

Bids are invited from all Branches and SIGs for a maximum sum of £10000 to carry out a Study Tour (nationally or internationally).

Time Frame: To be carried out anytime between April 2012 and Sept 2012.

Award Time Line:

| November 2011 | Final details including pro-forma available for the coming year and announced at the Autumn Forum |
| February 2012 | Bids submitted by the last day of the month |
| March 2012 | Assessment Panel decision, with the successful bidders informed at the Spring Forum. Feedback will be provided to the unsuccessful bidders subsequent to this. |
| April 2012 – September 2012 | Study Tour undertaken (six months). |
| September 2012 | Presentation to the Autumn Branch/SIG Forum |
| October 2012 | Final Report to the Assessor Panel |
| November 2012 | Submission of article to Project magazine |

Submission:

The proposal must be submitted only on the set pro-forma within the set deadline. Non-conformance including exceeding the word limits, will automatically exclude the bid from consideration by the Assessor Panel.

Selection Criteria:

It will be judged / assessed by the Assessor Panel against the following criteria.

| Utility, practicality and strategic fit of the Proposal | 30% |
| Innovation and creativity within the Proposal | 10% |
| Potential benefits to the Bidder Group | 20% |
| Potential benefits to APM | 20% |
| Overall value for Money | 20% |

Depending upon ranked order of merit, we will fund as many proposals as possible within the allocated budget. We look forward to receiving your proposals.
Invitation to Bid - APM Study Tour Award 2011-12

Submission Document (Use Arial Font - 12 point)

**Study Tour Title:**
Outperform your competitors by 202%........The Gamification effect

**Bidder Group:**
Ignite Group; Thames Valley Branch

**Background:** (including rationale -why) – 200 Words Max
With the “millennial” generation joining the modern workplace, PMs of the future will be looking for new ways to drive project team performance. The influx of ‘Xbox generation’ project managers raises the question of whether there are new ways to engage and motivate people through technology. The modern workplace is encompassed by numerous distractions from project work, such as email, LinkedIn, and Facebook. The APM and modern day Project Managers will face the same predicament of how to engage their future followers.

Gamification is the new and exciting concept of applying game-design principles to non-game functions in order to increase engagement. Studies have statistically demonstrated that highly engaged teams outperform competitors by 47 to 202 percent and have traits such as increased productivity, focus, involvement, commitment and loyalty.

Gamification is used by technologically savvy companies such as Facebook and Apple and has begun to move into the corporate world. Gamification incentivises desirable attitudes through use of technology to promote desired behaviours and make dull and repetitive project activities more enjoyable. It takes advantage of humans’ psychological predisposition to complete activities; thus every task is an opportunity to increase one’s status and profile.

![Example of Gamification system](image)

---


2
Invitation to Bid - APM Study Tour Award 2011-12

Proposal: (including who, what, where, when & how) – 250 Words Max

The proposal would be to; evaluate innovative methods for improving motivation and engagement of the APM community and the project team through Gamification.

The Thames Valley ‘ignite’ new entrants into PM team will source best practice ideas from companies successfully demonstrating Gamification principles, such as eBay, the BBC, NHS and DWP (estimated to save £20m by 2014 through employing Gamification). We will seek discussion and feedback through the APM website and forums to engage the wider APM population.

The Study Tour will be run as an online and virtual collaboration with worldwide Gamification knowledge-partners using webinars and video-conferencing. Travel will be limited to UK-based organisations willing to share Gamification success experiences. The project will be run according to Agile project methodology, of which Ignite team members have much experience, to research ideas and achieve fast feedback.

The study tour will conclude by documenting the outputs of the research and discussion stages into a report that will investigate the Gamification concept in both APM and relevant SIG forums. An event, further to the Branch Forum, will aid demonstration of the use of Gamification principles over the more traditional project management approach.

Please see the study tour plan and outline below:

[Diagram of study tour plan and outline]
Invitation to Bid - APM Study Tour Award 2011-12

Each stage of the project will be banded into Agile sprints outlines. Testing periods will be time boxed to achieve project timescales. Learning points and results will be based on outputs from prior sprints.

<table>
<thead>
<tr>
<th>April 2012</th>
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<th>June</th>
<th>July</th>
<th>August</th>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>Identify reference companies and supplier</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Support research and gathering ideas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Research and document ideas for discussions</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>Research and document details for discussions</td>
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<td></td>
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<td>7</td>
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<tr>
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<tr>
<td>9</td>
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<td></td>
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<tr>
<td>10</td>
<td>Document, event plan</td>
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</tr>
<tr>
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<td></td>
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</tbody>
</table>
**Invitation to Bid - APM Study Tour Award 2011-12**

**Objectives:** (SMART!) – 250 Words Max

- To research whether technology can be used to benefit a project team or group of people by increasing engagement over the course of the study.
- Generate interest and real-time feedback within the APM Forum, by publicising and promoting the Gamification Study prior to, during and following the discussion period.
- To demonstrate, at the Branch Forum, a heightened awareness of Gamification best practice ideas through increased APM discussion forum interaction.
- To identify and research individual Gamification ideas that could be useful for the Project Management profession. The effectiveness can be demonstrated by comparing Gamification KPIs such as:
  - Influence – No of visits
  - Loyalty – No of return visits
  - UGC – User Generated Content
  - Time Spent - per visit
  - Virality – The number of people talking about the brand. This can be measured through monitoring words or phrases on social networking sites
- Initialise knowledge sharing with SIGs and branches of Gamification recommendations for the project management community, following the study.
- Increase the profile of the TVB ‘New entrants into PM group’ with our target market through the Gamification study tour and subsequent organised event.
## Invitation to Bid - APM Study Tour Award 2011-12

### Key Risks (and how they will be managed) – 200 Words Max

<table>
<thead>
<tr>
<th>Rank</th>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Traditional Project Managers might not understand the Gamification concept</td>
<td>Communicate examples and gathered evidence with more detail</td>
</tr>
<tr>
<td>2</td>
<td>Results and recommendations might not be adopted due to lack of visibility</td>
<td>Implement communication plan for engagement and engage SIGs to help promote discussion. Use multiple routes of approach to publicise results and communicate outcomes – e.g. organise event, publish on APM website as well as in APM publications</td>
</tr>
<tr>
<td>3</td>
<td>Poor response of potential Users</td>
<td>Use branch and SIG networks to promote study tour, help publicise and raise awareness of the techniques and discussion</td>
</tr>
<tr>
<td>4</td>
<td>The study group might lose sight of the key concept of Gamification due to the bias of the discussions towards the use of website technology or existing work commitments</td>
<td>Entitle Project appropriately and use Project Management Plan to detail scope and objectives, monitor and control activities during study tour to ensure focus on Gamification is retained. Use Gamification methodology within the study tour project to engage both study group, and consulted participants.</td>
</tr>
<tr>
<td>5</td>
<td>Risk of low input to discussions and study tour itself during summer break (July and August)</td>
<td>Engage relevant parties, using stakeholder management plan, in advance of summer period to ensure participation.</td>
</tr>
</tbody>
</table>
Invitation to Bid - APM Study Tour Award 2011-12

Expected Benefits: (in addition to the mandatory presentation to the Autumn Branch / SIG Forum & write up in the Project magazine) - 200 Words Max

- Discover the concepts that engage people to participate and interact with websites like Twitter and Facebook, and whether they can be applied within Project Management.
- To increase APM Breadth through knowledge sharing within the project management community. This will absorb recommendations and key lessons from companies who have used Gamification effectively. The group will highlight practices and motivation techniques that will be offered for use within SIG working groups and publications.
- Promote interaction and discussion within the APM membership and online communities by instilling a sense of progression, mastery and achievement through Gamification.
- To encourage commitment and create an engaging experience for members of the APM’s online community.
- To increase the depth of leadership competencies with the involvement of appropriate SIGs in a best practice blueprint of Gamification on projects. This will:
  - Demonstrate a viable means of removing communication disconnects, team loyalty conflicts, and reduced ownership.
  - Produce a recommendation to the APM on online Gamification engagement techniques with evidence from the study, to evaluate opportunities for APM website/Forum improvements.
## Invitation to Bid - APM Study Tour Award 2011-12

### ESTIMATED COSTS (Per Person)

<table>
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<tr>
<th>Category</th>
<th>Cost</th>
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<tr>
<td><strong>TRAVEL</strong> (including to and from airports)</td>
<td></td>
</tr>
<tr>
<td>The ignite group have hand picked 21 specialists in the Gamification world to knowledge-share with. Of these 21, 10 are based in the UK. In order to value engineer the study tour we have elected to mitigate all unnecessary travel costs by restricting travel to the UK only, with video conferencing an option for further afield interactions. For further information on our value engineering, please refer to the supplied document on costs.</td>
<td></td>
</tr>
<tr>
<td>Travel total within the UK:</td>
<td></td>
</tr>
<tr>
<td>Travel covers UK rail fares to London, Oxford, Cambridge and Essex. Wherever possible, trips will be organised to fit alongside work commitments. All costs have been calculated from the geographical centre (Guildford) of our individual bases for ease of calculation.</td>
<td>£273</td>
</tr>
<tr>
<td>Other travel costs</td>
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<tr>
<td><strong>ACCOMMODATION</strong></td>
<td>0</td>
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<tr>
<td>Hotel – 2 Nights at £80 ppn</td>
<td>£160</td>
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<tr>
<td><strong>SUNDRIES</strong></td>
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</tr>
<tr>
<td>Food/drink at £5 for Lunch/Breakfast and £15</td>
<td>£80</td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
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<tr>
<td>Estimated Total cost per person (£ stg)</td>
<td>£513</td>
</tr>
</tbody>
</table>

| Other (specify) Event to publicise Gamification – venue and catering. | £750       |
| Estimated Total cost (£ stg) | £750       |
### Invitation to Bid - APM Study Tour Award 2011-12

#### ESTIMATED SPONSORSHIP (Per Person) (if Any)

<table>
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<th>Sponsor</th>
<th>Estimated sponsorship per person (£ Stg)</th>
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<td>1</td>
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</table>

<table>
<thead>
<tr>
<th>Estimated Number of Attendees</th>
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<table>
<thead>
<tr>
<th>Total Budget Requested</th>
<th>£3,315</th>
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Signed: (Tour Manager)

Ignite ‘Gamification Study Tour’ team (Sachio Baig, Scott Blunden, Alexa Briggs, Leila Kirk, Fernande van Schelle)

Signed: (Branch / SIG Chairman) (if appropriate)
Appendix B - Sprint Reports

Sprint Zero

The Gamification Study Tour started with a project initiation meeting covering agile training and Gamification introduction presentations.

Sprint One

The 1st sprint involved 12 hours work with a kick off on recruitment of other members, an introductory draft tour on communications and the creation of a survey to collect data.

Sprint Two

The 2nd sprint involved 15 hours work with preparation for the APM Thames Valley Board meeting, the start of the targeted research topics and publishing and APM forum communication on the tour.

Sprint Three

The 3rd sprint involved 13 hours work with best practice companies identified, the People SIG engaged, a contacts and cost log set up, and a brainstorm session on tests and experiments.

Sprint Four

The 4th sprint involved 6 hours with the start of survey results analysis, management of APM forum topics and a report on the tour output and the creation of a contact list.

Sprint Five

The 5th sprint involved 12.5 hours of work with the a survey results report published, an APM forum area set up, a demo investigation and a contact list report delivered.

Sprint Six

The 6th sprint involved 23 hours of work included the purchase of
Gamification summit videos and reviews started. Contacts were identified and introduction questions were written. 2 new recruits joined the tour during this sprint.

Sprint Seven

The 7th sprint involved 35.5 hours of work including reviewing 12 Gamification summit videos, 15 best practice experts contacted with 9 responses, and the formalisation of Ignite Gamification. 1 new recruit joined the tour during this sprint.

Sprint Eight

The 8th sprint involved 38.5 hours of work including the beginning of the event planning, reviewing of 5 Gamification summit videos, 12 best practice experts contact and organisation of expert calls and meeting.

Sprint Nine

The 9th sprint involved 36 hours work including send out the event flyer and opening bookings, the presentation and report work streams began and further experts were contacted and responded.

Sprint Ten

The 10th sprint involved 31.5 hours work to complete the Presentation and dry run given to TVB. The First report section drafts have been completed, and the BP expert conversations completed.

Sprint Eleven

Sprint 11 has involved 30 hours work to complete the Branch Forum Presentation, the report first draft and the APM BoK Version 6 analysis.

Sprint Twelve

Sprint 12 involved over 30 hours work to complete the Study Tour
## Appendix C - Sprint Backlog

<table>
<thead>
<tr>
<th>ID</th>
<th>Category</th>
<th>Task</th>
<th>Conditions Of Satisfaction</th>
<th>Responsible</th>
<th>Progress</th>
<th>Hours</th>
<th>Sprited</th>
<th>Dates</th>
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<tbody>
<tr>
<td>1</td>
<td>APM Community Engagement</td>
<td>Identity best person to act as APM forums campus rep</td>
<td>Name written down on Study Tour ‘Top Chart’</td>
<td>Richard</td>
<td>Done</td>
<td>0</td>
<td>25 Apr to 9 May</td>
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<tr>
<td>2</td>
<td>APM Community Engagement</td>
<td>Identity best person to act as APM Marketing team contact</td>
<td>Name written down on Study Tour ‘Top Chart’</td>
<td>Nick</td>
<td>Done</td>
<td>0</td>
<td></td>
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<tr>
<td>3</td>
<td>APM Community Engagement</td>
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<td>4</td>
<td>APM Community Engagement</td>
<td>Kick off for promotion throughout APM marketing team</td>
<td>Contact marketing team, highlight study tour</td>
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<td>1</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>APM Community Engagement</td>
<td>Identity best person to act as APM forums campus rep</td>
<td>Name written down on Study Tour ‘Top Chart’</td>
<td>Richard</td>
<td>Done</td>
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</tr>
<tr>
<td>6</td>
<td>APM Community Engagement</td>
<td>Kick off for promotion throughout APM marketing team</td>
<td>Contact marketing team, highlight study tour</td>
<td>Nick</td>
<td>Done</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sprint 1**

- **Goal:** "Promote a broad description of the concepts of agile, and how it is to be adapted to ignite study Agile presentations, filming, and documented on Project Place" (Done)
- **Tasks:**
  - Produce a draft concept of the description of concepts and how it can be used to promote the study tour
  - Provide information to target areas in sport and invite to be set up for home investigation sessions
- **Sprint Dates:** 25 Apr to 9 May

### Sprint 2

- **Tasks:**
  - Produce a draft of the Sprint 2 report. This will be delivered 1 week before the study tour.
- **Sprint Dates:** 23 May to 6 Jun

### Sprint 3

- **Tasks:**
  - Produce a presentation of the identified MP experts to the study group. This will allow the group to decide where to contact/study
- **Sprint Dates:** 23 May to 6 Jun
| GAMIFICATION – APM THAMES VALLEY BRANCH STUDY TOUR 2012 |

Gamification | Appendix C - Sprint Backlog 97

<table>
<thead>
<tr>
<th>Sprint #</th>
<th>Backlog Item</th>
<th>Description</th>
<th>Sprint</th>
<th>AL</th>
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<tbody>
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<td>1</td>
<td>Sprint Planning</td>
<td>Identify the key risks and opportunities for the sprint</td>
<td>20 Jun to 4 Jul</td>
<td></td>
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<tr>
<td>2</td>
<td>Daily Standup</td>
<td>Track progress and identify any blockers</td>
<td>20 Jun to 4 Jul</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sprint Review</td>
<td>Release the sprint backlog to the team and discuss any adjustments</td>
<td>4 Jul to 18 Jul</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sprint 1 - Planning**

- **Day 1**
  - Sprint planning
  - Identify key risks and opportunities

- **Day 2**
  - Daily standup
  - Track progress and identify any blockers

- **Day 3**
  - Sprint review
  - Release sprint backlog to the team and discuss any adjustments

**Sprint 2 - Executing**

- **Day 4**
  - Sprint planning (continued)

- **Day 5**
  - Daily standup (continued)

- **Day 6**
  - Sprint review (continued)

**Sprint 3 - Retrospective**

- **Day 7**
  - Sprint planning (final)

- **Day 8**
  - Daily standup (final)

- **Day 9**
  - Sprint review (final)

**Notes**

- Adjustments made to the sprint backlog based on feedback and progress.
- Key risks identified: [list]
- Opportunities explored: [list]
<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Story</th>
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<tr>
<td>16</td>
<td>Use case 16</td>
<td>Story16</td>
<td>Low</td>
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<tr>
<td>22</td>
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<tr>
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<td>Use case 30</td>
<td>Story30</td>
<td>High</td>
<td>2012-07-30</td>
<td>2012-07-31</td>
</tr>
</tbody>
</table>

Note: The above table represents a partial sprint backlog for a project. The table includes ID, description of use cases, story, priority level, start date, and end date.
### GAMIFICATION – APM THAMES VALLEY BRANCH STUDY TOUR 2012

#### Gamification: Appendix C – Sprint Backlog

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Task Description</th>
<th>Responsible</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Aug</td>
<td>1</td>
<td>Gamification</td>
<td>Produce a page summary of psychological discussion on MAs in a group: Document uploaded to RP</td>
<td></td>
</tr>
<tr>
<td>8 Aug</td>
<td>1</td>
<td>APM Community</td>
<td>Discuss with APM executive: the mapping of Gamification techniques and tools across the leadership (a workshop to be arranged)</td>
<td></td>
</tr>
<tr>
<td>8 Aug</td>
<td>1</td>
<td>Study Tour</td>
<td>Review vias email list: Study Tour Report</td>
<td></td>
</tr>
<tr>
<td>9 Aug</td>
<td>1</td>
<td>Study Tour</td>
<td>Agenda and proceedings to be distributed to RP: Update document to RP</td>
<td></td>
</tr>
<tr>
<td>15 Aug</td>
<td>2</td>
<td>Study Tour</td>
<td>Agenda and proceedings to be distributed to RP: Update document to RP</td>
<td></td>
</tr>
<tr>
<td>15 Aug</td>
<td>2</td>
<td>Study Tour</td>
<td>Agenda and proceedings to be distributed to RP: Update document to RP</td>
<td></td>
</tr>
</tbody>
</table>

#### Notes
- Gantt Chart: Contact the TVP brand with the idea of using their Voting Buttons for the event.
- Study Tour Event: Discuss an idea that will go to all of our Best Practices for Gamification and Gamification best practice by topic area.
- Study Tour Event: Discuss an idea that will go to all of our Best Practices for Gamification and Gamification best practice by topic area.
- Study Tour Event: Discuss an idea that will go to all of our Best Practices for Gamification and Gamification best practice by topic area.
- Study Tour Event: Discuss an idea that will go to all of our Best Practices for Gamification and Gamification best practice by topic area.

#### Summary
- Gamification: Document uploaded to RP.
### Appendix D - Gamification of Ignite Rules

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Responsible</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Sep 2012</td>
<td>Gamification of Ignite Rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Sep to 10 Oct</td>
<td>Review final reports for identified themes and ensure continuity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 -</td>
<td>Meet with stakeholders to finalize plans based on feedback</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D - Gamification of Ignite Rules

Ignite Team Gamification

The goal for players of the Ignite Gamification Study Tour is to collect and spend Ignite Shillings (£). Currency can be accumulated from completion of a set list of activities, which will be controlled by the Scrum-master.

Currency accumulation opportunities

- Meeting Master
  - Player accumulates £20 for teleconference attendance
  - Player accumulates £50 for face to face attendance
- Sprint Finishers
  - 1st Sprint finisher accumulates £100
  - 2nd Sprint finisher accumulates £50
  - 3rd Sprint finisher accumulates £30
- Vital Virtuoso
  - Sprint tasks are ranked by importance, the higher the importance the greater available Ignite Shillings to accumulate.
- Opportunity Oligarch
  - Sprinters gain additional Ignite Shillings for generating new tasks / opportunities / benefits to the Ignite Study.
  - Opportunity graded by the Scrum-master, and the player accumulates appropriate Ignite Shillings.
- Event Specialist
  - Players gain £50 per event they attend and promote the Ignite Study
- Recruiting Privateer
  - Players gain £30 for a new recruit, and a subsequent £50 if that recruit is deemed a success by the other players.

Currency Spending Opportunities

Players can buy a reward once they have accumulated sufficient funds. Example of the types of opportunities that would be available are listed below:

- £200 to specify the location that we meet
- £150 to specify the location we eat
- £50 to ‘first choice’ on the sprint backlog
- £350 for sprint respite – buying a sprint off in case of holidays/overloading
- A choice on the favours list, as volunteered by each player. E.g.
  - £50 Scott will lend you his Project Management for Dummies
  - £150 Richard will wash your car
  - £100 Alexa will lend you her powertools for the weekend
  - £80 Sachio will sing Mr Boombastic
  - Plus others to be volunteered by the Ignite Team

Ranking

Players will be ranked in terms of their overall accumulated value to the Ignite team. Players will also be ranked on individual currency accumulation opportunity categories. A metrics pack with leader boards will be produced and maintained at each half sprint.
Appendix E - Good Practice Experts Raw Data

The following pages contain the raw study material generated by the Thames Valley Study Tour Team over the course of their study. This is presented in its original format as recorded at the time of interviews and case study research. This information has been included in the report as there are many interesting snippets of information and pieces of advice from all of our best practice experts that have not been able to be included within the main report.
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<table>
<thead>
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<th>Organisation</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
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<td>SAP &amp; Kog and Enterprise Gamification</td>
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<td>Rodolpho de Hempton</td>
<td>CogniLink</td>
<td>Interview</td>
<td>53</td>
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<td>Stephen Javer</td>
<td>Cranfield University</td>
<td>Interview</td>
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</tr>
<tr>
<td>Angelina Barbarian</td>
<td>Bunchball</td>
<td>Interview</td>
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</tr>
<tr>
<td>David Cotterill</td>
<td>Department for Work &amp; Pensions</td>
<td>Interview</td>
<td>56</td>
</tr>
<tr>
<td>Brian Burke</td>
<td>Gartner</td>
<td>Interview</td>
<td>57</td>
</tr>
<tr>
<td>Scott Sinclair and Andrei Marczewski</td>
<td>Cargomni</td>
<td>Interview</td>
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</tr>
<tr>
<td>Nigel Sudale</td>
<td>Gartner</td>
<td>Interview</td>
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<tr>
<td>Tim Vandenberg</td>
<td>Hesperia Unified School USA</td>
<td>Education Gamification Means No Child Left Behind</td>
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<td>Adeo Ressi</td>
<td>The Founder Institute</td>
<td>Vitamins for Startups: Gamification and Innovation</td>
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<tr>
<td>Seth Cooper</td>
<td>Foidit</td>
<td>Solving Scientific Problems with Gamification Watch On-Demand</td>
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<tr>
<td>Matt Maclaurin</td>
<td>Deloitte</td>
<td>Game-Based Learning</td>
<td>101</td>
</tr>
<tr>
<td>Andrea Kasprzak</td>
<td>B2B</td>
<td>How to gamify your sales</td>
<td>102</td>
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<tr>
<td>Kes Sampanther</td>
<td>Synergy</td>
<td>Motivational GPS: Understanding the Science of Motivation</td>
<td>102</td>
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<tr>
<td>Sunny Lee</td>
<td>Motiva</td>
<td>Mozilla Open Badge – Gamified sharing on Steroids</td>
<td>103</td>
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<tr>
<td>Byron Reeves</td>
<td>Consultant</td>
<td>Fun at Work: Gamification and Increased Productivity</td>
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<tr>
<td>Mike Martoccia</td>
<td>The Dopamine Agency</td>
<td>Lessons from the World of Card Counting</td>
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<tr>
<td>Jeff Ma</td>
<td>Tenser</td>
<td>Gaming with the crowd</td>
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</tr>
<tr>
<td>Kevin Akeroyd</td>
<td>Badgesville</td>
<td>Gamification of Business – The Future of Enterprise</td>
<td>105</td>
</tr>
<tr>
<td>Raja Paharia</td>
<td>Bunchball</td>
<td>How to Sell Gamification to Your Organization</td>
<td>106</td>
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<tr>
<td>Jan Guerrero</td>
<td>Lot 18</td>
<td>Four tips to Gamification Success</td>
<td>107</td>
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<tr>
<td>Billy Rodgers &amp; Jeff Coughlan</td>
<td>Red Critter Tracker &amp; Malmi</td>
<td>Red Critter Tracker</td>
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</tr>
<tr>
<td>Tricia Gelman</td>
<td>Data Com</td>
<td>The Enterprise Gets Gamified: Lessons from the Front Line</td>
<td>108</td>
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<tr>
<td>Gamification Specialist Panel</td>
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<td>Gamification</td>
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<tr>
<td>Gregory Love &amp; William (Bill) Platt</td>
<td>Yammer &amp; Engage</td>
<td>Threats &amp; Opportunities for Gamification</td>
<td>110</td>
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<tr>
<td>Tim Chang</td>
<td>Zif</td>
<td>The Automatic Customer: How to Design User Behavior</td>
<td>111</td>
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<td>James Gardner</td>
<td>Organised Chaos</td>
<td>The game that can give you 10 extra years of life</td>
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<td>Adeo Ressi</td>
<td>The Founder Institute</td>
<td>Let’s use video to reinvent education</td>
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<td>Jane McGonigal</td>
<td>Consultant</td>
<td>Hampshire’s Gamification: Motivate, Innovate</td>
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<td>Elman Khan</td>
<td>Khan Academy</td>
<td>Engaging Your Enterprise: Driving Greater Sales Performance Through Gamification</td>
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<td>Brian Weimer and Natasha Oxenburgh</td>
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<td>Meaningful Play: Getting ‘Gamification’ Right</td>
<td>114</td>
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<tr>
<td>Sebastian Diercting</td>
<td>Consultant</td>
<td>Interactive, games and gamification: the gamification of learning and instructing</td>
<td>115</td>
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Expert Identity: Mario Herger - SAP AG and Enterprise Gamification

Date of Interview: 13/06/12
Interviewed by: Scott and Fernande

### General

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your objective in using gamification?</td>
<td>Improve efficiency through engaging desirable human behaviors</td>
</tr>
<tr>
<td>Has your objective been met?</td>
<td>N/A</td>
</tr>
<tr>
<td>Explain how your tool/method/practice works.</td>
<td>Work - fun - more people want to do it</td>
</tr>
<tr>
<td></td>
<td>Also, the gamification creates relationships and thereby a community - people feel more valued and return</td>
</tr>
<tr>
<td>Why gamification?</td>
<td>Looking for a step change in the way the community interacts, particularly with regards to innovation</td>
</tr>
<tr>
<td>What had you tried prior to implementing gamification?</td>
<td>Incentivisation - refer to ‘Drive by Daniel Pink’ for why money doesn’t incentivise</td>
</tr>
<tr>
<td>How does gamification compare with other methods for success, ease of use, engagement?</td>
<td>There is a step change with the way that the community interacts and how streamlined the customer experience within the customer service area has become</td>
</tr>
<tr>
<td>How long has it taken you to set this up?</td>
<td>It has been an evolution over 2-3 years - not a finished product either, gamification will need to evolve through monitoring trends</td>
</tr>
<tr>
<td>How have you set up the management of gamification?</td>
<td>To enhance behaviours desired as any other tool</td>
</tr>
<tr>
<td>How much time does the management of the Gamification practice take?</td>
<td>About the same as any ‘Management Tool’ - there need to be people to police the rules and monitor for cheats. Also to set out new goals / tasks / moderate points scoring</td>
</tr>
<tr>
<td>How was productivity in comparison to other methods measured?</td>
<td>Increase of 10-20%</td>
</tr>
<tr>
<td>What have been the recognized cost / time benefits to the team / business?</td>
<td>More motivate workforce - increased quality of responses on the customer services site</td>
</tr>
<tr>
<td></td>
<td>- Where non-monetary gamification has been removed (in other examples) behaviours have been changed to the extent that an improvement of 10% remains. Correspondingly trends have seen that where monetary gamification has been removed a desecurisation of behaviours and work ethic makes the team less productive than before gamification was implemented</td>
</tr>
<tr>
<td>How are these quantified?</td>
<td>More tasks achieved within certain time scale - SAP customer services site quality has improved</td>
</tr>
<tr>
<td></td>
<td>- of World of Warcraft engagement drove 250,000 wiki pages</td>
</tr>
<tr>
<td>What are the longer term gamification plans?</td>
<td>Continue evolution</td>
</tr>
<tr>
<td>What went well with your implementation of gamification?</td>
<td>N/A</td>
</tr>
<tr>
<td>If you were to do the work again what would you differently?</td>
<td>N/A</td>
</tr>
<tr>
<td>Are there certain time constraints in which you should gamify an organisation?</td>
<td>Do not big bang an organisation, you should introduce slowly, preferably from the grass roots up. Not Management Down.</td>
</tr>
</tbody>
</table>

### Analysis of Methods

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the best / worst features of this practice?</td>
<td>Great for competitive types, need to adapt for those less motivated by competition</td>
</tr>
<tr>
<td>What happens when the points / badges / levels run out?</td>
<td>Monitor as participants near the top level, then need to adapt. Need to make new levels that reward that level. Have to be very careful of pushing the boundaries too easily if your max levels are reached. The process needs transparency.</td>
</tr>
<tr>
<td>Is there a ‘lifetime’ for this type of method, can it be continued indefinitely?</td>
<td>Can continue indefinitely - especially when a community is created. However, need to develop system in order to develop community Must meet the social needs to create a community. This keeps people involved. Think Baster model (Killers, Achievers, Explorers, Socialites)</td>
</tr>
<tr>
<td>What are the alignments / conflicts with the ‘classic’ project environment? (Need to define ‘classic’!)</td>
<td>Aligns in that it can motivate people to do the boring PM tasks and communicate whether they have done them. Conflicts as will need to administer as any other tool and there will always be the conservative skeptics</td>
</tr>
<tr>
<td>How do you manage the impacts of gamification? (denotivation for losers, highlighting of poor performance, people rewards)</td>
<td>Design the system to drive behaviours, not actions</td>
</tr>
<tr>
<td></td>
<td>- Vary and increase ways to earn points so that leaders are not always fixed</td>
</tr>
<tr>
<td></td>
<td>Make it transparent</td>
</tr>
<tr>
<td></td>
<td>- Erase bad performance over time / average out - e.g. credit rating - allows you to have a bad week!</td>
</tr>
<tr>
<td></td>
<td>- Should never make a leaderboard when new users cannot catch up, you should rate against weekly totals or personal bests.</td>
</tr>
<tr>
<td>Have you deliberately designed this gamification practice to use both positive and negative influences to affect behaviour?</td>
<td>Mainly designed for positive</td>
</tr>
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</table>

### User Analysis

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How have people responded?</td>
<td>General response is good - board level interest when key MGM client first visited EA Games. In advance of SAP AG pitch</td>
</tr>
<tr>
<td>Does it increase motivation and engagement?</td>
<td>Yes - look at benefits on SAP expert board</td>
</tr>
<tr>
<td>Have you had resistance to the implementation of this practice?</td>
<td>Yes, it meant a slow takeoff</td>
</tr>
</tbody>
</table>

Gamification | Appendix E - Good Practice Experts Raw Data 105
## Expert Identity: Rodolphe de Hemptinne - Cognol ink - leaderboards on staff internationally

**Date of Interview:** 03/08/12  
**Interviewed by:** Femande van Schelle

### General

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your objective in using gamification?</td>
<td>Driving key behaviours laid out by company values</td>
</tr>
<tr>
<td>How was your goal met?</td>
<td>Yes</td>
</tr>
<tr>
<td>Explain how your tool / method / practice works.</td>
<td>Key behaviour is recruiting successful experts for consultation - points are gained for sign up; conversion; choice by client; consultation with client; re-use - recommendations - Research Associates get monetary bonuses at the end of the month.</td>
</tr>
<tr>
<td>Why gamification?</td>
<td>N/A</td>
</tr>
<tr>
<td>What had you tried prior to instilling gamification?</td>
<td>N/A</td>
</tr>
<tr>
<td>How does gamification compare with other methods for success, ease of use, engagement?</td>
<td>N/A</td>
</tr>
<tr>
<td>How long has it taken you to get this up?</td>
<td>1 year</td>
</tr>
<tr>
<td>How have you set up the management of gamification?</td>
<td>In-house IT system and backbone</td>
</tr>
<tr>
<td>How much time does the management of the gamification practice take?</td>
<td>What is the overhead for this (hours / days)?</td>
</tr>
<tr>
<td>How has productivity in comparison to other methods measured?</td>
<td>N/A</td>
</tr>
</tbody>
</table>
| What have been the recognised cost / time benefits to the team / business? | Research associates work longer hours  
|                                                                    | - Greater quality of experts                                          |
| How are these quantified?                                              | By data                                                               |
| What are the longer term Gamification plans?                           | Evolve                                                                |
| How would you implement gamification?                                  | N/A                                                                   |
| If you were to do the work again what would you differently?           | N/A                                                                   |

### Analysis of Methods

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the bad / worst features of this practice?</td>
<td>Does not apply to all parts of business - therefore need to address other parts of business performance differently</td>
</tr>
<tr>
<td>What happens when the points / badges / levels run out?</td>
<td>Leaderboard - so N/A - however, position on Leaderboard equates to a portion of a monthly bonus</td>
</tr>
<tr>
<td>Is there a lifetime for this type of method, can it be continued indefinitely?</td>
<td>Indefinitely as long as monitored</td>
</tr>
<tr>
<td>What are the alignments / conflicts with the ‘Classic’ project environment?</td>
<td>N/A - as projects run in company are run by Research Associates - i.e. not Classic Project Environment - competition is between projects</td>
</tr>
<tr>
<td>How do you manage the impacts of gamification? (demotivation for losers, highlighting of poor performance, people rewards?)</td>
<td>N/A</td>
</tr>
<tr>
<td>Have you deliberately designed this gamification practice to use both positive and negative influences to affect behaviour?</td>
<td>Positive</td>
</tr>
</tbody>
</table>

### User Analysis

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many people responded?</td>
<td>Well - increased enthusiasm</td>
</tr>
<tr>
<td>Does it increase motivation and engagement?</td>
<td>Yes</td>
</tr>
<tr>
<td>Have you had resistance to the implementation of this practice?</td>
<td>No - were completely transparent</td>
</tr>
<tr>
<td>Over what period of time has it taken you to get basic functionality / full user take-up?</td>
<td>1 year</td>
</tr>
<tr>
<td>Is this your first instance of gamification or a development of an idea?</td>
<td>Development of idea</td>
</tr>
</tbody>
</table>
| How long did it take to convince people (team / board / stakeholders) that this was the right method to use? | CIO developed idea with CIO - instant management buy-in  
<p>|                                                                    | Employees saw fun                                                      |
| How have you dealt with those resistant to using this method?         | N/A                                                                   |
| Has user buy-in dropped off after a period of time?                   | N/A                                                                   |
| How have you kept people engaged?                                     | N/A                                                                   |
| How have you dealt with those that haven’t engaged?                   | N/A                                                                   |
| In what specific applications, aside from comparable target achievement, has gamification been useful? | Yes                                                                   |</p>
<table>
<thead>
<tr>
<th>Expert Identity: Stephen Carver - Cranfield University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of interview: 21/08/12</td>
</tr>
<tr>
<td>Interviewed by: Doug</td>
</tr>
</tbody>
</table>

**General**

<table>
<thead>
<tr>
<th>How and where have you applied Gamification?</th>
<th>Over the past 10 years as a simulation for Project Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the objectives of using Gamification?</td>
<td>Prepare the employees to perform better. People tend to be confident on paper, but can’t cope with the pressure of emails, communications and unexpected events and end up failing to manage the project.</td>
</tr>
<tr>
<td>Explain how your method works.</td>
<td>A complex, highly interactive computer software where users are faced with a project simulation. They have to not only manage the project planning and control but also manage stakeholders. Simulators running at Cranfield uni with PM students, but also as a training tool to large organisations (e.g. Barclays). Examples of the project simulations include managing a mining project in South America, build a football stadium in the UK and the merger of two banks. The simulator allows you to earn fake money and you can even get sacked. Most students fail.</td>
</tr>
<tr>
<td>How does the management of Gamification work?</td>
<td>Half day or one day activities</td>
</tr>
<tr>
<td>How much time (overhead) does the management of this practice take?</td>
<td>It is very low cost to organisations and you can show and audit the results, which makes it attractive.</td>
</tr>
<tr>
<td>What have been the recognised cost / time benefit to the team / business?</td>
<td>The sims force users to work under the pressure of unforeseen events and manage project under high levels of stress.</td>
</tr>
<tr>
<td>Any lessons learned from the application of a Gamification method?</td>
<td></td>
</tr>
</tbody>
</table>

**Analysis of Methods**

<table>
<thead>
<tr>
<th>What are the best / worst features of this practice?</th>
<th>Best: creates instant realisation of the complexity of projects, human interaction, Simulation of real life situations!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a lifetime for this type of method?</td>
<td>The sims usually take half a day.</td>
</tr>
<tr>
<td>Is there any conflict with “business as usual”?</td>
<td>This method is not an ongoing change, but applied as a one day or half day activity.</td>
</tr>
<tr>
<td>How do manage negative impacts of Gamification (demotivation for losers, highlighting of poor performance)?</td>
<td>The users can track down their performance, minute by minute, and see what they’ve done wrong. This makes it easier for them to accept criticism as they can also check what other teams did right to succeed.</td>
</tr>
</tbody>
</table>

**User Analysis**

<table>
<thead>
<tr>
<th>How have people responded?</th>
<th>Anger, resentment, blame, refusal to even make eye contact sometimes. But it works on the long run.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the method increased motivation and engagement?</td>
<td>Certainly does. It makes them aware of what can go wrong in a project.</td>
</tr>
<tr>
<td>Have you had resistance to the implementation of the method? How to deal with resistance?</td>
<td>Companies buy the simulators to prepare employees.</td>
</tr>
<tr>
<td>Expert Identity: Angelina Elhassan - Sales &amp; Marketing, Bunchball</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Date of interview: 20/09/12 Stamped</td>
<td></td>
</tr>
<tr>
<td>Interviewed by: Scott</td>
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</tr>
</tbody>
</table>

## General

**Explain how your tool/method/practice works.**

Bunchball has been operating since 2009 as a Gamification reference site. In 2007 Bunchball released their first Gamification tool Nitro which was primarily focussed on media and entertainment engagement. Their customers were 'The Office USA', and other media companies. By 2011 they had 100 clients using Nitro. In 2012 they began to shift their focus towards enterprise, and picked up 100 more clients. Nitro can be used as both an internal tool, or external facing. For example it could be used in a project team or on a company intranet.

There are also other Bunchball products such as 'Spark' which is a cut down version of Nitro, but more specifically focussed on certain areas. E.g Marketing, Sales, production. This tool is partnered with salesforce.com. Also 'Pulse' which links AV to enterprise, and is a bit more clever & focussed.

## Why Gamification?

N/A

## What had you tried prior to installing Gamification?

N/A

## How long has it taken you to set this up?

N/A

## How would you set up the management of Gamification?

N/A

## How much must does the management of the gamification take place? What is the overhead for this (hours/days)?

N/A

## What are the longer term Gamification plans?

Create more enterprise gamification tools with focus on training or internal sales tools.

## What would you with your implementation of Gamification?

N/A

## Are there any lessons that have been learned for the implementation of Gamification?

Think the biggest lesson is that people will try to game the system so it is important to set up the mechanics in a way that they cannot. For example, if you give points for sharing to social networks, then users may share times a day to their Facebook just to get points. So, a fix to this problem would be to limit the amount of times they can share.

## Analysis of Methods

### What are the best/least features of this practice?

Typically we set up Nitro to begin with 20 widgets and 15 out of the box badges, but you can create more if you wish. The points we deal with very carefully, we have specific guidelines as to how these are dished out. For example with sales we try and not give points for just calling sales contacts, but instead for completing a deal.

### What happens when the points/badges/levels run out?

N/A

### Is there a ‘lifecycle’ for this type of method, can it be continued indefinitely?

N/A

### How do you manage the impacts of Gamification (demotivation for losers, highlighting of poor performance, peoples rewards)?

N/A

### Have you deliberately designed this Gamification practice to use both positive and negative influences to affect behavior?

N/A

## Analysis

### How have people responded?

Yes, the statistics differ depending on the scenario that Gamification is set up to cover though.

### Does it increase motivation and engagement?

Typically the older generations who are non-gamers then are put off. They think it is all to do with gaming, when in fact it is nothing to do with gaming. We don’t talk about it Gamification is everywhere – scouts, the army, karate it’s all about earning badges or levels.

### Over what period of time has it taken you to get basic functionality/full user take-up?

N/A

### Is this your first instance of Gamification or a development of an idea?

N/A

### How long did it take to involve people (team/board/stakeholders) that this was the right method to use?

N/A

### How would you deal with those resistant to using this method?

N/A

### Has user buy-in dropped off after a period of time?

N/A

### How have you kept people engaged?

Keep things challenging – it should never be easy.

### What message would you give to the project management community?

Dismayment costs projects and organisations, you need to get every member of your team engaged with your maximum potential. There is no reason why you wouldn’t want to do this, so you should think about how best you can increase engagement through gamification as the perfect tool.

### Grassroots or top down approach to Gamification?

Again it depends on the scenario, but I would think that it should be directed more from a top down approach. However if Gamification creeps into an organisation from a grassroots level then it is also fine, it needs some thought as to how it is dealt with though.
**Gamification | Appendix E - Good Practice Experts Raw Data**

**Expert Identity:** David Cotterill - Then Dir of Innovation, DWP, Now Dep Dir, Cabinet Office

**Date of Interview:** 03/09/12

**Interviewed by:** Doug

### General

**How and where have you applied Gamification?**

David was then the Director of Innovation at DWP, and they were in search of available software to stream innovation. They then realised innovation would be better driven if crowd sourced, so general employees could contribute to the innovation process.

**Innovation management software – lots had some sort of game mechanics (badges, leaderboard, stock exchange), they wanted it to feel different. Lots of different ways to engage.**

**Twice delivered to clients.**

**What are the objectives of using Gamification?**

- Unearth the people within the department who were innovative, and provide them with a resource to be able to cooperate.

**Explain how your method works.**

Stock market simulation software where ideas are the product, if more people "buy" stocks of a particular idea, the value goes up. If an idea is successfully implemented stock holders profit.

Second: innovation was driven by "eureka moments", but most ideas are successful if you get a group of people with different skills to develop the idea, get a number of people to comment in the idea (Crowd sourcing initial evaluation of ideas). Users can get points if you comment on other people's ideas. And also voting system where people could discard ideas that weren't good.

**Second stage: teambuilding stage, people volunteered or would be incentivised by getting shares (as in stock market) on a given idea. The share price rises according to demand. If the idea gets accepted the share prices go to 100, if an idea is not implemented then the price drops to 0.**

The best ideas are actually the ones that are implementable.

They use lots of leaderboards (people with most wealth, people with more ideas, most successful ideas).

### Analysis of Methods

**What are the best/worst features of this practice?**

- Best: provided a centre of gravity for innovation and change in the organisation (which is very large). The transparency of conversations and flow of ideas made it a very powerful vehicle.

- Worst: Preconceptions, middle manager think their staff will lose time to use gamification, while they should be doing their jobs.

**Is there a lifecycle for this type of method?**

Initially, it was only a try, but the objective was to run it forever. But as it became popular, they changed focus: initially delivering ideas, now the focus is how to get as many people as possible to buy-in to the ideas that were acceptable. Keep focus aligned with what your objectives are.

Initially there were 10X users, but only a small number was using it constantly. Now that the focus was changed to engagement, there is 50X users.

**Is there any conflict with “business as usual”?**

It should be seen as part of their day job.

### User Analysis

**How have people responded?**

It is optional. Users choose to be part of it.

**Has the method increased motivation and engagement?**

Virtual currency was quite useful for short term effect. The openness of the site made it easy for users to share problems across the country, so the social effect was a good point.

They sold it to the chief-execs, and announced it at a conference. So they went high up to get acceptability and target people who are likely to block it.

**Have you had resistance to the implementation of the method? How to deal with resistance?**

Decided in September and launched it in November. They kept it as a beta for 6 months.

**Over what period of time has it taken you to get functionality / full user take-up?**

Heard the term "gamification" only after implementing. Initially they were after a platform to stream ideas and crowd source it. The concept of earning points drives the whole thing, because it gives you immediate feedback. Stock market game was easy to sell to CEO.

**How did you convince people (teamboard/stakeholders) that this was the right method to you, and how long did it take to convince them?**

They went to different buildings, handed out flyers. They also kept a weekly newsletter. People suggested goodies (artwork). At some point people lost motivation because of everything happening to public sector cuts (downsizing). It has to be a constant engagement campaign.
### Expert Identity: Brian Burke - Research Vice President at Gartner

**Date of Interview:** 20/09/12  
**Interviewed by:** Doog

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>How and where have you applied Gamification?</td>
<td>Research and case studies for companies that have applied the method</td>
</tr>
<tr>
<td>What are the objectives of using Gamification?</td>
<td>In Project Management, to increase employee/team performance. It is important to make the distinction between less complicated skills (repetitive tasks) which are easier to apply Gamification to high skill tasks such as project management.</td>
</tr>
<tr>
<td>Explain your method works.</td>
<td>Mainly confidential, but they have written case studies already published, e.g. the DWP. We can’t have access to these case studies.</td>
</tr>
<tr>
<td>How does the management of Gamification work? How much time (overhead) does the management of this practice take?</td>
<td>No answer available. Very few examples of gamification of work. More examples in mil, education. Many clients start with manual tools, which is very time consuming. Putting in place appropriate tools to track and analyse results is very important. Leverage a platform to automate the task direction to reduce time.</td>
</tr>
<tr>
<td>What have been the recognised cost / time benefit to the team / business?</td>
<td>2 categories: A. Adding a game layer into an existing activities (relatively low cost) B. Turning activity into a game (far higher cost).</td>
</tr>
<tr>
<td>Any lessons learned from the application of a Gamification method?</td>
<td>Relatively new subject. Failures: people might think it’s only about playing games and earning badges and points (which are just representations of something that is meaningful). People get around the system just to get the reward, other than getting the task done (he called this “to game the system”). Games not focused on motivating the target audience. What motivates some, might demotivate others. It is important to know specifically the audience and what behaviours you want to change.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Analysis of Methods</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the best/worst features of this practice?</td>
<td>Best: Change behaviour, develop skills and solve problems. Worst: being driven by novelty and hype, if not done properly it is not sustainable, not truly meaningful to motivate the users.</td>
</tr>
<tr>
<td>Is there a lifetime for this type of method?</td>
<td>The key is sustainable behaviour change. Although some applications might be campaign short term impact.</td>
</tr>
<tr>
<td>Is there any conflict with “business as usual”?</td>
<td>The term gamification is a loose term. People might misunderstand the term with something not serious.</td>
</tr>
<tr>
<td>How do manage negative impacts of Gamification (demotivation for losers, highlighting of poor performance)?</td>
<td>Leaderboards usually prove to be demotivation. But sometimes punishment is necessary, as is a negative feedback. Need to be very careful in getting people, forcing people into engaging in a gamified application. DWP, 130k employees. 5 thousand were active on idea street, it is an example of an optional gamification.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>User Analysis</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>How have people responded?</td>
<td>In a new trend, you always hear the positives first. There is not enough date, the negatives might not be out yet.</td>
</tr>
<tr>
<td>Has the method increased motivation and engagement?</td>
<td>Yes</td>
</tr>
<tr>
<td>Have you had resistance to the implementation of the method? How to deal with resistance?</td>
<td>Little experience, but in an opt-in environment there is no resistance. So this might be the option to go for.</td>
</tr>
<tr>
<td>Over what period of time has it taken to get basic functionality/full user take-up?</td>
<td>Getting started may not take too long, identify target audience first, but start small. Build more sophisticated aspects of the game over time. Having a definite system might take forever, it should be an ongoing continuous improvement method.</td>
</tr>
<tr>
<td>How did you convince people (team/boards/shareholders)?</td>
<td>Very limited data about gamification success. Traditional way of selling is to show examples of success in other organisations, but not really possible yet, not enough data to make a convincing argument. Convince through logical argument of increasing motivating and engagement of people to downside risk.</td>
</tr>
<tr>
<td>Has user buy-in dropped off after a period of time? How to keep people engaged?</td>
<td>It requires an ongoing tuning of the game mechanics to keep people engaged.</td>
</tr>
</tbody>
</table>
**Expert Identity: Scott Sinclair and Andrzej Marczewski - Capgemini**

**Date of Interview:** 10/06/12

**Interviewed by:** Doug

### General

**How and where have you applied Gamification?**
- Twice internally
- Twice delivered to clients

**What are the objectives of using Gamification?**
- To get teams to contribute with new ideas
- To encourage the end user community to participate

**Explain how your method works.**

The application of Gamification should be used as a lever to encourage desired behaviours. It depends on the project. Each situation requires a different gamification method. Suggested model to define a gamification method:

1. Game mechanics: badges and/or points for tasks accomplished
2. Reputation: user status (promoted by leader boards)
3. Social mechanics: altruism, self-realisation and social enterprise

**How does the management of Gamification work? How much time (overhead) does the management of this practice take?**

Not enough experience to answer this question

**What have been the recognised cost/time benefit to the team/business?**

Again, it very much depends on each case. Although other factors should be considered other than the cost of designing a gamification method, for instance: customer satisfaction, long term savings.

**Any lessons learned from the application of a Gamification method?**

There is no recipe to be followed in applying a gamification method. Each case is different.

### Analysis of Methods

**What are the best/worst features of this practice?**

Best: It is cool, fun, it engages users and can improve user's status

Worst: Gamification as game mechanics only, people might do the work just to get a badge and not to get the work done. It might drive wrong behaviours. People not keen on competition.

**Is there a lifetime for this type of method?**

It depends on the project, but Gamification should be introduced as a long term organisational culture change.

**Is there any conflict with “business as usual”?**

The trick is not to tell people they are being “gamified”, it should be introduced as a new work practice; users perceive it as a different experience.

**How do manage negative impacts of Gamification (demotivation for losers, highlighting of poor performance)?**

If there is demotivation then the game mechanics have been designed wrong in the first place.

**In what specific applications has gamification been useful? Any project specific application?**

Example: Utility company gamified the field research process to encourage workers to complete all tasks they were supposed to.

### User Analysis

**How have people responded?**

To guarantee good acceptance, Gamification should be used as a way to reward compliance rather than punish inaccuracy. Exactly how kids or animals are educated, you reward them for being good, rather than punishing them for being bad.

**Has the method increased motivation and engagement?**

100% yes. If well designed the method should work as a game that people play for fun. While playing a game, the brain releases dopamine for each little task accomplished, which gives people a good sensation. It is the same good sensation you get when you see a cute puppy.

**Have you had resistance to the implementation of the method? How to deal with resistance?**

If there is resistance, than the method was not designed correctly in the first place.

**Over what period of time has it taken you to get basic functionality / full user take-up?**

In this case, 6 to 8 months.

**How did you convince people (team/boards/stakeholders) that this was the right method to you, and how long did it take to convince them?**

There has been no convincing; people have asked them to develop a gamification method.

**Has user buy-in dropped off after a period of time? How to keep people engaged?**

Gamification should be introduced as a new working practice. If well designed, users will become addicted to it and will not want to stop using it.

---

**Diagram:***

1. Understand the Problem
2. Conceptualise the desired Behaviours
3. Design Processes
4. Define your Business Scenarios
5. Employees?
6. Community?
7. Customers?
Expert Identity: Nigel Suddell - CTO Giffgaff  
Date of Interview: 17/08/12  
Interviewed by: Alexa

**Introduction**

Giffgaff are a mobile network run by their customers - using gamification for all aspects in the business model. [http://giffgaff.com/](http://giffgaff.com/). Giffgaff concentrate on the gamification of their customers to encourage them to help each other and to define the company strategy but it also extends to the internal company culture.

**Notes**

<table>
<thead>
<tr>
<th>They concentrate on building communities with the customers and gamify their engagement.</th>
<th>There are an infinite number of levels that a customer can work their way up based on answering tech questions, contributing to the community and the business direction and providing ideas. The customers don’t know exactly what they need to do to get to the next level of kudos within the community. A monthly customer leaderboard is published. There is a slot on the homepage for the best contributing customers. High kudos customers get “payback” from the company, e.g. Involved in giffgaff PR. Being really engaged eventually gets you super user status where you start to have individual relationships directly with giffgaff staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giffgaff staff review and read the community areas constantly but instead of “moderating” the community they provide mentoring and management. They don’t delete posts but instead engage with the users to mentor them into positive approaches for their comments. They found that the moderation approach didn’t work so they now focus on educating users and building relationships with them - effective but involves lots of time investment from staff.</td>
<td></td>
</tr>
<tr>
<td>There is a community ideas board which is reviewed monthly by the company board and over 500 customers ideas have been implemented - linked back to the people who suggested them. They crowd source pricing models with the user community.</td>
<td></td>
</tr>
<tr>
<td>Each member of the company has their face and profile on the website. The communication to the user community is clear, open and honest. Each staff member should spend 2 hours per day involved in the user community activities.</td>
<td></td>
</tr>
<tr>
<td>Internally to the company; There is a weekly all employee meeting where the staff and trading information is shared and discussed. There is an internal staff medal table - olympic themed this month! Employee of the month. &quot;Luke and Les&quot; award each month for the best staff - involving dressing up! The type of people that are recruited into the company are ones that are incentivised by the challenge to keep the philosophy as the company grows. The office move that is currently being planned is being crowdsourced by the staff for ideas/locations/pace set up using voting and ideas boards. Lourde boisterous atmosphere is full of loud boisterous people with outgoing and fast moving tendencies. Company has grown from 23 to 72 staff and is working through how they keep growing and keep their philosophy.</td>
<td></td>
</tr>
<tr>
<td>The community are engaged in projects that are spawned from the ideas boards. E.g. Re-launching their knowledge base. Customers get payback and quido points for involvement in projects. There is a road map of projects that is shared visually with staff and customers - a “route master”. The re-branding was managed as a project with the community as stakeholders. Project to build (literally) the brand values within the company. Projects are tracked via magnets on the wall through to delivery and whilst also showing how the projects contribute to the company strategy and vision. Picture board in the office of ideas/future projects.</td>
<td></td>
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</tbody>
</table>

**Lessons Learned**

- Lots of consensus and sharing sometimes makes for slow initial progress; but later stages of projects are faster as everyone is bought in.
- Don’t launch or cancel projects without telling the community.
- Focus on the culture, don’t take that or the team for granted, it needs constant effort.
- Trying to get BAU business processes to work (e.g. New joiners) as fast as the rest of the company needs them to is a challenge.
- The importance of food in bringing the team together - kitchen for proper cooking in the office, once a week staff cook their national foods, staff cooking rota.
### Education Gamification Means No Child Left Behind

**Presenter:** Tim Vandenberg, Teacher at Hesperia Unified School, USA

**Review Date:** 30/07/2012

**Reviewer:** Lelia Kirk

**Video Format:** Presentation

#### NOTES

Tim uses Monopoly as a means for teaching and getting his students to play the game No child Left behind. No child left behind is a game encouraged by the US government and teachers can lose their job if students do not partake and perform well. Monopoly was designed to teach anti-capitalism as only one person wins and others go bankrupt. It is emotionally involving.

Monopoly morning skills can be learned:

- Students with good great are invited to partake in morning monoplies and is a great way of teach maths.
- Maths
- Economics
- Negotiation
- Social skills
- Collaboration
- Delayed gratification through investment
- Positive sportsmanship
- Finances
- Savings
- Strategy
- Rules
- Fixed and variable assets etc. etc.

Entire math class is Gamified:

- Rewards and levels
- Top students with high grades are given MP3 player every quarter
- To get to his class the kids have to pass district benchmark tests and go through various classes
- There is a leader board
- Intrinsic reward e.g. confidence
- No homework, just play monopoly
- Outstanding results each year shows that gamification works
- Accurate and speed maths
- The class is fun

**Conclusion**

Gamification can motivate parents to be supportive at home.

### Question and Answers

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are girls better than boys?</td>
<td>Monopoly is a social game and girls are better. The boys maybe good at figures, however girls seem to be better at negotiations.</td>
</tr>
<tr>
<td>Why is difficult for people to see math as an activity?</td>
<td>His passion is gaming and teachers need to find their passion and bring it into classroom.</td>
</tr>
<tr>
<td>Differentiation between competition and play. Motivated kids are more competitive and others maybe de-motivated because of competition.</td>
<td>Other motivation such as social aspect is encouraged for kids who do not wish to compete.</td>
</tr>
<tr>
<td>Is the incentive playing a game?</td>
<td>There seem to be something about monopoly.</td>
</tr>
<tr>
<td>Is this system scalable?</td>
<td>Actions have been taken to extend the system.</td>
</tr>
<tr>
<td>Are there any deviation from rules?</td>
<td>Kids do come with new rules.</td>
</tr>
</tbody>
</table>

### Vitamins for Startups: Gamification and Innovation

**Presenter:** Adeo Ressi from the Founder Institute

**Review Date:** 29/07/2012

**Reviewer:** Alexa Briggs

**Video Format:** Talk

#### Notes

- Need good inputs for good outputs
- Fear and penalties as well as good as rewards
- Measure everything
- Succ in ways for people to prove their commitment to the game/topic
- Think like an entrepreneur
- Make the rewards worthwhile
- Focus on a way for people to share social experiences
- Rate people quickly and display real time results
- Feedback from people who feedback you value
- How to turn “scores” into meaningful results for people
- Meaningful tools and badges in the game to enforce desired behaviours
### Solving Scientific Problems with Gamification Watch On-Demand

**Title:** Solving Scientific Problems with Gamification Watch On-Demand  
**Presenter:** Seth Cooper, Creative Director of Foldit  
**Review Date:** 29/07/2012  
**Reviewer:** Alexa Briggs  
**Video Format:** Talk

#### Notes
- How to use video game theory to get people to solve scientific problems. 
- Games are a great way of getting people to solve problems. 
- Use games to solve problems that experiments and computers find difficult. 
- If you can encourage the power of people to solve issues they can do it more quickly than computers for complex problems. 
- Humans do the high level spatial reasoning and computers do the number crunching. 
- Encourage people with backboards and competitions. The user base is a wide range of jobs, it spreads the game/problem around the world, but does engage primarily men. 
- Used the game theory of teching - guides and in-level teaching with positive feedback for doing well. 
- Allow players to change the game and given them higher power to design their own aspects of the game. 
- You get scale of power and thought through games that share ideas and concepts with so many people. 
- Get people to create their own games and change the games they play.

#### Key Items
- What you need to use games for science. 
  1. Find a computationally unsolvable issue. 
  2. Find a problem that needs a human ability to solve it - e.g. Spatial reasoning. 
  3. Find a problem with a purpose.

### Gamifying Global Trading

**Title:** Gamifying Global Trading  
**Presenter:** Matt MacLaurin, EPIC Design Lab, eBay  
**Review Date:** 09/07/2012  
**Reviewer:** Leila Kirk  
**Video Format:** Presentation

#### Notes
- Talking on research product - not for commercial release. 
- This is a concept for gamifying retail. 
- The presentation provides a short glimpse into the hardware, software and potential applications. 
- Unfortunately the presenter can out of time and although various elements of the project were discussed, the presentation was sporadic. 
- For the contribution to our study, it is an example of potential use of gamification in another industry, however the presenter does stress this is research and not.

#### Presentation
- PayPal and eBay are eco-systems that you have to be careful when making changes. 
- Game mechanism = Gamification 
- Game Graphics changing user expectation 
- Design departments looking like game studios 
- Culture: Orientation around user which are much deeper 
- Processes: Organised around subjective and large scale 
- Tools: Enable artists move quickly 
- Straps: Enable consumers to buy anything from anywhere 
- eBay Local: Identify stores with product you are after in the area you are at

#### Digital Downtown
- It was an interesting idea for game designers. 
- Take high-end shopping area and map the area. Install large touch screens and install Bluetooth and wifi on various locations. 
- Apps provided and people with apps are given tokens for a serious of games. 
- The company is taking a portfolio approach (more than one game). 
- Users have opted in network sensor detect your presence. 
- Means of interaction are: Kiosks, phones and web 
- Experience span multiple devices e.g. phone as bay station and kiosk as satellite 
- Retailers participate in this ecosystem sponsoring experiences and providing rewards (freebies, discounts) for players 
- Multiple levels of engagement include casual play, shopping focused, long running games 
- Aim: To get consumers to visit retailers

#### Hardware
- Surface 2 - touch screen 
- Prospective Touch screen 

#### Authentication
- Face recognition software

#### Application
- e.g. Catch me if you can coupons 
- Game experience of 2 minutes. 
- How does coupon gets issued to the individual? 
- e.g. Deal central 
- Gives you time bound offers and can be tailored to specific demographic e.g. age group, gender, etc. 
- e.g. Friendshop example of Algorithmic offer 
- As an example three teenage girls like to shop together and kiosk identified them if they opted in the scheme. The kiosk goes through their data and identifies common pieces and algorithmic offer such as if they all buy the same product today together they get 40% discount is issued.
Gamification

Title: How to gamify your lives
Presenter: Andrea Kuszewski - Researcher, Therapist, and Science Writer at IEET
Review Date: 30/07/2012
Reviewer: Fernande van Schelle
Video Format: Presentation

Notes:
- Goals should be things that you should just be able to perceive as possible
- Fluid intelligence - ability
- Study: showed that people can improve cognitive ability as long as task is perceived as fun
- Hard core training + motivation = maximum cognitive growth
- Five principles:
  - Seek novelty
  - Challenge yourself
  - Think creatively
  - Do things the hard way
  - Network
- Seek novelty:
  - Polymaths generate enjoyment from achievement
  - Generate dopamine through learning new things
- Challenge yourself:
  - As soon as you achieve a skill, move on
  - As soon as you achieve a level, push the envelope
- Think creatively:
  - Think with both sides of brain
  - Switch between conventional and unconventional thinking
  - Make connections between concepts by keeping dynamic - zoom in, zoom out; divergent/convergent
  - Learn the same information in multiple formats - conceptualise in different ways
- Do things the hard way:
  - Keep active, don't get lazy
  - e.g. using ggs, vs using maps
  - Avoid cognitive shortcuts wherever you can - use long hand, rather than technology
- Network:
  - Speaking to other people opens your mind
  - Learn best by teaching others
  - Use social technology for information sharing for maximum efficiency

Learning is difficult - but relish the pain!
You can always achieve a little bit more than you think is possible.

Title: Motivational GPS: Understanding the Science of Motivation
Presenter: Kes Sampanther, Director of Media Strategy - Cynergy
Review Date: 30/07/2012
Reviewer: Leia Kirk
Video Format: Presentation

Notes:
- Understanding motivation
- Understand uses of the application (this is not necessary the client) and what motivates them before designing the game or overarching interface
- Using what engages people on business applications e.g. CRM

Presentation:
- Human Motivation
  - Psychologists say liking & wanting are different circuits which are linked.
- Skinner's rat
  - Do you think the rat will press the bar if instead of food it would be awarded by a badge?!
  - Flashing light cue pressing lever and getting food
  - I.e. motivation is predicting the future
  - Brain is mapped out to get the food
- Dopamine Neuron Activation
  - Monkey's got trained to get juice (i.e. reward) when a certain light flashes.
  - Brain starts anticipating and map out where and when to expect the pleasures.
  - In gaming programmers use unpredictable rewards (variable-schedule rewards).
  - What is the brain doing when it starts wanting?
  - As soon as you find what gives you pleasure, your brain maps out how you got these pleasures so you can repeat getting there.
  - This is like a pleasure maps and defines the unique DNA for each person.

- Design Patterns
  - Common motivations are sex and food
  - Bootstrapping
  - Is evolution way to teach baby sit, crawl, walk and talk. Doctors use these as milestone to monitor baby's progress.
    At the point of crawling, the goal of crawling is set and the baby finds the skills to crawl and these maps are then set in the brain.

- Learning
  - Curiosity and exploration (known-knowns, known-unknowns, unknown-unknowns) are two motivational goals in the brain
  - Curiosity is known-unknown is to go and find out and close the information gap used also by writers to enable page turn also used in TV e.g. series such as Lost
  - Unknown-Unknown causes exploration, going out to explore new areas and find out.
  - The maps in this case are: can be strong i.e. novelty seeking or opposing fear ambiguity or failure of unknown.

- Competitive
  - We can trust strangers and be competitive based on the mapped DNA in us. (Chimpanzees are competitive, bonobos are egalitarian)
  - Social competition is status, autonomy, fitness indicator and hierarchy (what is cool and what is not)

- OCEAN
  - Openness, Conscientious, Extraversion Aggression and Neuroticism
  - All elements which make up the identity Matrix

- Cooperation
  - We trust strangers, reputation is very important, fairness, we are social policing constantly, reciprocally
  - We also empathise

- Brain mapping
  - Invaluable cues and experiences build up the maps in each person e.g. the children's game of coldwar-wamer-holler
  - A compass is built that allows us to direct ourselves to the goals mapped in our brain.
  - Through software the user behaviour is changed it is also branded as GPS mapping.
  - When approached by clients being asked to design an application to get their employees to undertake an activity, Cynergy asks what motivates the employees first and then design the motivational cues for that.
  - Email reminder for users to use an application is a design failure.
## Gamification

### Mozilla Open Badge - Gamified sharing on Steroids

**Presenter:** Sunny Lee, Mozilla  
**Review Date:** 25/07/2012  
**Reviewer:** Douglas Silva  
**Video Format:** Talk

**Notes:**
Mozilla is best known for their Firefox web browser. The company is now engaged on a new concept called Open Badge.

The concept was created around the idea that individuals are constantly learning something new, not necessarily practical work qualifications or studies, but also experiential and informal learning.

These being skills people learn throughout their course of their lifetime not usually noticed by others, e.g. baking, hiking, coding.

Badges work as tokens or stars to visually represent a particular skill or competency you learned.

You would not necessarily want to expose on your CV that you went to a cooking class, or not show on your Facebook account that you followed a professional course with your company.

So, what if there was a shared ecosystem and infrastructure where you could store, collect and expose all skills you have? That is the idea of Mozilla Open Badge.

### How does it work?

The concept involves three key players.

- Badge issuers, organisations or institutions interested in issuing badges according to the skills they can teach.
- Badge earners: the general public who would be interested in solving tasks and taking courses to earn these badges.
- Badge dispensers: places in which earners would be able to meaningfully display their badges.

Users create an Open Badge account to access their "backpack" (following the idea of good). which is a virtual repository for the earners to store all badges they have collected and then choose how they want to expose and share it with the world, via Facebook, Twitter, Linkedin, etc.

### What does a badge contain?

- Badge metadata: all the information and criteria required for someone to have acquired it.
- e.g. who issued the badge, who earned it, what is the criteria associated with the badge, expiration date (if it has one).

Information can either be a requirement or optional.

### So what is the progress of the concept?

Mozilla organised the competition with the intention of raising the profile of Open Badge in the first quarter of 2012.

The competition received 600 entries, which were then shortlisted to 90 finalists who presented their ideas to a judging panel.

After analysing the finalists, 30 entries were selected and received funding from the MacArthur foundation to develop their ideas in the course of this year.

Some big players are among the 30 winners, such as Disney, Pixar, Nasdaq and Motorola.

### Progress and plans for 2012:

1. Public beta version released, still being improved.
2. Open badge being developed: light weight system for small shops to develop their own badge systems.
3. Improving displayer API.
4. Endorsement – organisations that want to issue badges but are not interested in creating their own systems would be able to use already developed systems to issue existing badges that meet specific and similar criteria.
5. V1.0 – Have a fully functioning first version of Open Badges.

An application programming interface (API) is a specification intended to be used as an interface by software components to communicate with each other. (Wikipedia)

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## Fun at Work: Gamification and Increased Productivity

**Presenter:** Byron Reeves  
**Review Date:** 15/07/2012  
**Reviewer:** Alex Briggs  
**Video Format:** Talk

**Notes:**
Gamification for work seems to be different at the moment and not as good

- More psychology is needed in the work gamification
- Focus on rewarding behavior
- How to create an appropriate venue for work
- Leverage work social networks, get social status
- People might not like their work performance being public – as it impacts pay etc.
- Fun games appropriate to jobs, e.g. call centre or shop sales are "easy" to gamify
- Focus on motivation – why would people play the game?
- If you give people context to the game people get more engaged, e.g. a story or background
- Think of the time frame – longer in a work context than a "normal" game context
- Encourage use of gamification – at work and at home by simply showing how much people use
- Catch as much data as you can to enrich the experience of gamification - regulatory concerns here always complicate work gamification
- Encourage call centre people to take difficult calls for example by using data to really work out what "tasks" are worth rewarding
- Go for big metrics that really matter to people and to the company
- Focus on the areas you want to focus and motivate people towards
### Notes

**Crowdsourcing**

Taking a function, sourcing it to an undefined (generally large) network of open people, in an open call format.

*E.G SET* @ home

Sir Francis Galton (Fellow of the royal society) talked of the “Madness of crowds”. He said they lacked intelligence and they were prone to delusions. However, when guessing the weight of an ox, the average of the crowd’s guesses were more accurate than that of any given individual.

So collectively, brought crowds you are able to get a more accurate solution.

Example used of the film “The Last Starfighter” - a PC Game is created and dropped on each planet to find the best ‘StarFighter’ in the universe. We are now able to create games such as this in able to find those out there that are able to ‘help’ us with whatever tasks we need completing.

Example give on ‘Discover - fold it’ - all to do with folding proteins.

Very simple on a small level. But it can be a game and this is exciting.

CNN have created a game that does exactly this too. It shows you what your progress is.

**Double fine adventure - another game the $1M dollar project.** Aims to gain ‘backers’ and get pledges of cash.

**Stackoverflow** - answers, votes, views, leaderboards another crowdsourcing project. Getting crowd to do stuff for you.

**TopCoder** - Run algorithm challenges. Competitions that are driven for metrics amongst people across the world. Ratings are run and players compete to be in top number.

Top algorithm players compete for access to TopCoder Open.

Words best coders and algorithm writers come to the TopCoder Open to compete in LA, best of the best and get monetary prize for winning. However all want status of competing in TopCoder Open.

Want access to higher tier of competition

If you compete and you win, you get to become a reviewer. Each reviewer gets to improve / alter competitions and it moves onto next set of challenges for coders.

**CodeAcademy** - great way to learn to code, and it is a game.

Usually crowd does not come if challenge is not right. Core components. Need crowd from which to be able to pool from.

Need an incentive that is worth attaining in terms of points.

Lesson learned from my own perspective is that points were converted into cash far too easily, led to a loss of a lot of money. We could have stayed with just points and people still would have played.

In terms of creating competitions need to be very clear about what is to be done, who can do it, what skill sets are needed, and the ‘rules’ are very well defined.

**Final tip** once you have momentum keep it up! Very easy to loose it and once it has gone very hard to get it back.
**Title:** Lessons from the World of Card Counting  
**Presenter:** Jeff Ma, CEO TenXer  
**Review Date:** 31/07/2012  
**Reviewer:** Fernande van Schee  
**Video Format:** Presentation

**Notes**

- Gaming the system and falling
- TenXer builds personal statistics and leaderboards for organisations
- Kevin Costner - at Las Vegas, winning then losing
- John Starks, Basketball player - starts intelligent being, then drunken mess
- Kate Bosworth, 21 - failed because she was with Jeff Ma
- Playing the system
- Know the rules - reduce the house advantage
- Miss out the omission bias
- Gut feeling vs strategy - strategy should win everytime
- Right decision vs right outcome - should separate the two
- Separate evidence from rules - apply the rules
- Remember the history
- Count the cards out to determine that which is left in the deck
- Card counting is illegal
- Thinking you can beat it promotes popularity

**Motivate in: 1. Trust in team 2. Game mechanics - levels, with rewards and titles 3. Communication - make it clear how to communicate 4. Metrics - know if it works or not 5. Transparency 6. Competition**

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**Title:** Gamification of Business – the Future of Enterprise  
**Presenter:** Kevin Akeroyd, Badgley  
**Review Date:** 07/07/2012  
**Reviewer:** Alexa Briggs  
**Video Format:** Presentation

**Notes**

- Big business getting involved in gamification and want to be part of it
- Enabling customers and businesses to be able to engage successfully, no matter what the product/application
- Control is no longer in the hands of big companies, it’s in the hands of individuals
- Finding and managing talent, customers and competitors
- Prediction that some big organisations will disappear as they fail to understand the changes in how to interact with people
- Focus on treating people with love, not locking them in
- Focus on keeping the creativity – through gamification and keeping things social
- Top tips:
  1. Realise that gamification is not about virtual pigs, it’s about engagement
  2. You have to admit that you are no longer in control (assume that the control is with your customers and employees)
  3. Act as if the companies have to join the employees (the companies flex to the employees, not the employer fitting to the company)
  4. Embrace the power of the community. 90 days to certify 10,000 products via online community vs 350 products in two years via an internal team and controls.

- Gamification is very powerful, but need to include the reward piece or social mechanics
- The future of the enterprise needs a platform approach – i.e. embed across the whole company
- Everything must link to strategy and connect to the community (partner, customer, employee). Wrap all customer touch points into the strategy, e.g. customer service
- Reputation is more important to people than privileges or badges.
- Profile cross platform/terminate point to different communities
- Social is not just social networkers – don’t just constrain it to a particular tool, software or website – embed in all systems
- Encourage people to follow content and products
- Collect the data from people and do something with it! Analytics and business intelligence.
# How to Sell Gamification to Your Organization

**Presenter:** Rajat Paharia, Chief Product Officer at Bunchball

**Review Date:** 26/07/2012

**Reviewer:** Scott Blunden

**Video Format:** Talk

**Notes**

1. How to sell Gamification to your organisation - done from point of person presenting to board on his company.
2. Point out that we are struggling to make commitments & buy in from customers.
3. Point out that Gamification is not ‘Gamification’ but recognition & reward, loyalty, reputation, things that matter to people. Which can all be used to drive.
4. Boy scouts have been using for years!! Their badges have no value, but through a shared understanding of the value of those badges and the effort and
5. Like Bells in karate!
6. Companies that are using Gamification: (Not necessarily for project teams!!)
   - NBC, Maker, Warner Bros, Ford, Century Links, Bravo, ABC, Disney, Right Guard, Solar Winds, Kimberly Clark, Bluewolf, Hasbro, Syfy, Intel, Samsung, Cisco, LiveOps, VMWARE, ESPN, HP, Xfinity, Playboy, Adobe, MTV, FLUOR, Alpine, Nestle, Meredith Corp
7. Constellation Research: 50% of all social business initiatives will include an enterprise gamification component by 2013
8. Gartner: 70% of the largest global companies will use gamification for at least one aspect of their organisation by 2014
9. Gartner: 50% of companies that manage innovation processes will gamify those processes by 2015

## Engaging Partners / Suppliers

**Company - LiveOps**

Objective was to create a learning community to improve performance of 20,000 virtual call centre agents

Agents trained through ‘MyWork’ and outperformed peers by 23% in average call handle time and boosted customer satisfaction.

## Engaging Employees

**Company - Bluewolf**

Objective was to motivate 350 employees to utilize social media and increase Bluewolf visibility and reputation. Campaign called ‘Going Social’

Results were huge increase in social sharing, 80% increase in blog traffic, 45% increase in website traffic, Company Klout score increased (influence score of company), 57% increase in internal collaborative activity.

**Ford Canada**

Ford Canada used gamification to engage users to online training portal to increase certification of employees.

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# Salesforce's Gamification: Motivate, Innovate

**Presenter:** JP Rangaswami

**Review Date:** 16/07/2012

**Reviewer:** Fernande van Schelle

**Video Format:** Talk

**Notes**

1. Experience is Thought leader in Gamification and work
2. Gamification is all about: Engaging employees, driving innovation
3. Historically new concepts are slow on take up:
4. Wiki history – word had stigma first, then was used everyday
5. Moodle – why use something called people, rather than see use for efficiency of search
6. Blogs – why write when at work – because people learn
7. Gamification – elicits emotion, hence works against concept

## Why Gamification?

- **In business of business** - The purpose of business is to create a customer
- Money is end result of something done well
- Transparency of goals and articulation of goals is what counts at organisational level - allows you to do the job well
- Gaming forces people to work through systematised learning process – not present in organisation, therefore cannot assess ability. If you put it in place in an organisation then you can assess effectiveness and ability.
- **Feedback empowering** – “how am I doing?”. 1st question from child - empowers workforce If you put it in concept answers drivers – learn, bond, defend, acquire – act in parallel – as an employee you want it 4
- Perception of likely or impossible – masks, anchors and drives achievement of that goal - so if you break it down and lay it out so people know how they are going to get where they are going, then you will have an engaged workforce that will act
- To drive organisational performance - need goals and objectives, match between skill necessary and ability, make sure accurate feedback loops provided
- Engage employees - disengaged people don’t participate
- An organisation needs clear goals, match skills, get job done - for success
- Engagement increases usage and drives adoption
- Allows testing of hypotheses - gamification that works is a result of iterative pinning down of key drivers
- Gamification is learning/sportmanship hunting for business world
- Define where going, test, assess and refine – way to approach Gamification
- Live in data intensive world
- Use tools to increase engagement, improve performance – right tools to do so

**Example**

- Use to reward customer for complaining – and improve product

**Strap line**

Gamification is a tool to enable businesses to do what they do, well and engage their workforce to perform
Gamification for High Achievers - The 'How-To Guide'

Notes
- He has gamified elements of his life to apply to himself and cause self-improvement.
- Experience of gamifying myself has seen me make a lot of mistakes, but I think this has helped me improve.
- Gamification as a tool for making me want to do stuff for personal goals rather than mundane things.
- Like fitness gamification to get fitter - great but how apply to projects/work?
- Importance of goal structure essential

Rule 1: Gamify your habits first.
Habits are not easy to break. Eg smokers after heart surgery. Not easy.
- Eg I tried gamifying work ethic, sleep schedule, diet.
- Weekend warrior - only time I have to work on personal projects that are key to me. Took a post it note and wrote numbers 1 - 13, 1 - 20 & 1-25 on them.
- These correspond to hours working on personal projects at weekend. More I worked, more I crossed off on post its. Once I completed post its, I treated myself to reward on bottom eg $50 on amazon.
- Noticed that after a few weekend of doing this, I had trained bad habits out (not working) I no longer procrastinate!
- It is too much to gamify everything all at once, so I looked at habits first as they should be reflex behaviours to change.

Rule 2: Slow and Steady
- It's a practice mission to a game. Much better user experience to play an easy out down version.
- Often surprises me that like new years resolutions people tend to do personal goals by jumping straight in the deep end.
- Means you stick with it in short term, but revert after few weeks. Therefore slow and steady is better. ‘Kaizen’ is theory that companies are adopting to do this.
- Eg. Speech writing. Every day I spent 10 mins writing I gave myself 3 points. For every day I was on a streak (without dropping a day) I would get bonus points.
- When I approached milestones eg first draft submission I would redeem these points for things on my amazon wishlist.
- Learn this: 10 mins is key. Didn’t take much mental strength to do 10 mins. Also 10 mins commitment lead to me actually spent me writing for more time without realising.
- 10 mins commitment got me to do it, and there was greater productivity. Think that if I committed to greater time I wouldn’t have done it.
- Make commitment so low that you can accept it, and take it on.

Rule 3: Mobile Apps Good. Post-it notes great!
- Software can for making commitments to, and for tracking progress, but good old fashioned post its are great for a hard, written down commitment, and something that is visible at all times eg wall calendar.
- With post its can break down into simple categories:
  - Goal - Develop better eating & exercise habits.
  - Rewards - 500g = Xbox game, 150 is bottle of wine, 500 trip to France.
  - Points = Run 5, salad 1, candy 2.
- Ability - use this post it for one naughty meal without any points deductions (discard after use) (replenish at different times).
- Using this is great for swift iterative production & flexibility.
- Allows you to test and explore.

Rule 4: People & Purpose
- Distinct correlation between how many people involved and success of goals. Also how much purpose was time to goals with how far I got towards goals.
- So how engaged are we with the topic.
- Good example is a workout partner. Having them there as someone else to be accountable to makes you go. You don’t cancel on them like you do to yourself!
- Collaboration elements - work out partner will help. Also adds competition. Need the engagement & team ethos to increase productivity.
- Purpose - ask yourself regularly does the individual goal add to the sum total of the final outcome, where I want to be? If not drop it. Poor goals are quick easy to fall.
- Clear connections between what doing now and what achieving in 4 years.

Rule 5: Rewards done right
- Fast way to decrease motivation is to reward incorrectly. Need to use tangible rewards, cash does not motivate as well as something you can imagine using or doing (which can be of much lower value!!!)

Questions
- What if you are working with someone who is not motivated? Best way is to lead by example, be a really good salesman of the gamification concept!! Post it notes were good to sow people what was going on!
Title: Red Critter Tracker
Panellist: Billy Rodgers, CEO of Red Critter Tracker & Jeff Coughlan, CEO of Matmi (Users of Red Critter)
Review Date: 09/07/2012
Reviewer: Scott Blunden
Video Format: Presentation

Notes:
Specifically about bringing Game Mechanics to the workplace through enterprise software.
Specifically that can touch every part of a business and make it fun, and make people want to be there.
Started developing Red Critter Tracker by looking at basics of project and product management.
Wanted a project management tool that had greater informatory to anything else on the market.
Something that was simple but everyone can take it up.
Primarily for software developers.
Developed to reflect status and incentives to the project team.
These things have been proven to motivate employees.
But for everyone in the enterprise not just executives!
For status - badges. 50 different badges some easy, some hard, some expire and some can be stolen. Some serious and some just for fun.
Eq complete 4 projects and you get the 'Destroyor Badge', update your profile picture too often and you get the 'Photogenic' badge.
Badges are fun and engaging, but more importantly begin to show a profile for your project team members. In the future this could lead you to being able to select project teams based on their individual profiles.
Allows you to be more clever in selecting resources. Eq if you need to do night shifts - get those people in who have unlocked the 'Night Owl' badge.
Incentive - we have built a rewards centre, which each company controls and is individual to each company.
You can take this framework, and PMs can assign points to tasks.
Can help to improve QA or timeliness depending on which points you assign to the task. E.g. if you want QA to spend more time improving the quality of a product, you can award a greater level of points to this.
Bonuses for on time delivery.
Team members take the points and redeem them in the store. Which the company fills / builds.
For example companies have allowed people to buy plastic figurines to sit on desks, some can buy extra 30 mins for lunch breaks.
Starbucks gift cards, one company said if individuals can gain enough points they can purchase their way onto a top secret project - covert project.
At the end of the day if you can add a little bit, make them smile then the results are far far reaching.

Case Study:
MATMI - UK Company
Jeff Coughlan CEO a game development company who build games for other corporations (viral gamemaker)
Eq United Airlines, gorillaz, Red Bull, Nokia
Gamify advertising
Incentives they were using a PM tool called BaseCamp
Problem was trying to get people to use it. They wouldn't sign in, couldn't track hours, or progress. Frustrating!
Created negative feelings, disciplines etc negative workforce
Tried Red Critter, and found that stuff wanted to use it. Those who were troublesome before, suddenly were top users!
Finally incentivise them, rather than bashing them and trying to force them to fill in / complete work. The onus is on them to do it and earn!
We have found that the programmes like earning points and buying stuff. Designers like collecting the badges for their profiles!
Productivity has massively increased.
This has been down to the gamified tool, which has helped the team buy into the organisation.
Easily has helped to manager projects, and also has helped for PMs to easily see where the projects are up to. Less time needed to manage!
It means that the PMs can review / and then further incentivise the team if necessary to drive onwards rather than forcing progress. Also can reward for early completion of tasks.

Title: Four tips to Gamification Success
Presenter: Tricia Gellman - Sr Director of product marketing of Data.com
Review Date: 02/05/2012
Reviewer: Sachio Bag
Video Format: Presentation

Notes:
Gamification has proven to be a powerful tool to excite communities, boost engagement, create influence and build loyalty. The challenge companies have is how they successuately introduce gamification mechanisms that align communities with business goals.
Ask users the crowd to gather business data a better way
Gather data from the crowd is effective eg wikipedia & Yelp
4 simple steps to success
1. define user motivations in status, connections, incentives
2. apply incentives
3. create expert evangelists
4. Have a plan for when people get angry
The illusum test: are you set up for success
Can I describe in one sentence what motivates my community
My incentive model helps grow my key business goals
Why is my expert evangelist are and they know additional ways they can help support my business
I have an emergency plan to deal with angry people
If you fail the illusum test spend more time with your chosen community to close this out.
<table>
<thead>
<tr>
<th>Notes</th>
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<tbody>
<tr>
<td><strong>What are some of the aspects of the dark side of the Gamification?</strong></td>
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<tr>
<td>Lack of understanding of gamification as it is a new concept. E.g. people wanting badges etc.</td>
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| **Does gamification set women to fail as they are more social?** |
| Experience shows more women play and are more competitive. Social games attract more women than men. |
| It is important not to make assumptions that everybody is achievement focus and some are interested on social side. |

| **What will you suggest you should NOT do?** |
| Pitch - never pitch concept when going for budget, focus on plan and what mechanics will achieve |
| Execution - use good marketing |
| They did not have a problem with marketing, their issue was that clear and fair points budget is a must have. Do not screw with points! |
| Do not underestimate the emotional intensity specialty point wars and disputes. |
| Have means of detecting cheaters. |

| **What skills did you need?** |
| Project Management is needed. There are too many stakeholders with different goals. Implementation from budget to go live in 7 weeks is very fast. |
| Clear expectations and managing stakeholder expectations is important. Never over promise. |
| Artists, Game Designers and programmers |
| Intelligence of what the story is and where you go and how you get there and how. |
| Internal Advocate needed to explain to the organisation what this is and how you use it and they understand the technology and platforms they use. |
| Everybody needs to be honest and realistic with respect to feasibility and time frames. |

| **What are key performance indicators?** |
| Have three main areas. Players, users, Registrants. People on the community or people active within the community. |
| Performance is measured by total interaction e.g. page views, comments, replies. |
| Also use user insight and understand and monitor user behaviours and their behaviour in connection to other behaviours and how they interact with the overall brand. |
| Within healthcare the measures in USA were healthcare costs and loss of productivity: |
| Measured through Sustain engagement (continue to play) and inclusion of educational activities that need to be undertaken to win |
| 30/70 split between education and action |
| One project the individuals were obese and the results demonstrated weight loss through gamification by managing stress, eating vegetables and working out more. |

| **What would you not gamify?** |
| The response is business specific and serious illnesses does not seem an appropriate area for gamification. |
| Not that it can not be gamified, it just is a serious area that does not seem appropriate. |

| **How did the experience change you?** |
| As a gamer, he found he had to force himself to talk to the community. Now he contributes more to the community. |
| Not a gamer and is a very demanding person, has found carrot works better than stick. He has learnt to use powers of positive feedback than negative feedback. |
| The same applies to home life. |

| **Issue of Anonymity and Close proximity** |
| Observation was that one game was for external people and one is for work place and the workplace game seem to have a certain amount of accountability. |
| There is a huge appetite for leader boards and they have introduced various degrees of comparative capabilities. |
| They also have indicators who are employees in the environment and what their expertise in accordance to community consensus. |
| Anonymity is key, gamification works well when your corporate reputation is at stake. |
| As a consumer product this will not be very clear. Social game that gets the positive feed back is difficult to build. |
| Small social environments such as parishes where reputations is key will work very well. |

| **Dealing with Gamification fatigue** |
| Concern has been gamification fatigue, how do you overcome this? |
| Make sure you are building something people care about and awards that relates to them. |
| Has experiences typically around the 100 days. |
| The following three factors to be taken into consideration: |
| Build around social community; |
| Visions of where you could be and where you can reach; |
| Personalisation and downtime allowed. Giving them something to do whilst they are away and when they come back. |
### Gamification

**Presenter:** Gregory Love, Business Development, Yammer, and William (Bill) Platt, VP, Operations, Engine Yard  
**Reviewer:** Sachio Bajg  
**Video Format:** Presentation

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| Benefits of badgeville  
Rewards are visible to the entire network  
Peer recognition drives engagement  
Recognition from superiors not drives the most engagement  
Gain employees to mimic the good behaviour  
An example of gamification in use was one used by Deliotte who created an app.  
The app was to be used to connect the 168 of consultants around the globe. It was called  
Who, What, Where' enables users to check in and as there incentivised to give details of what they are doing people can share the leads chased.  
App helps to identify the rising stars  
Bag line - badgeville surfacing behaviours from across all experiences  
Bill Platt  
Share user learning through examples  
This problem was that users were frustrated when looking for the answer to queries within their knowledge base.  
The software enables users to add likes and dislikes to responses therefore enabling the user to find the most appropriate answer much more quickly. The app meant that users found the answer 240% faster |

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### Threats & Opportunities for Gamification

**Presenter:** Tim Chang, eBay & The Mayfield Fund  
**Reviewer:** Scott Biunden  
**Video Format:** Presentation

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| So why the pushback?  
Game starting to peak, what are gotchas, is it on a downward spiral?  
Gamification using points and badges allows one to plan how you want yourself to be - the mapping out of your development.  
How do you map out your career path? What do you want to be - wizards/trolls?? What is the explicit framework, and how can it be made useful?  
Gather hypecycle/hype curve. Gamification seemed to pick up really quickly and lots of people were interested to begin with, but no are seeing some |

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### Will it loose meaning?

- Could be something that just becomes part of everyday life - not a specific individual thing eventually  
- You will stop noticing if it becomes integrated well. Standard framework.  
- Number 1 threat is in the lack of focus on best practice & success stories.  
- How can you score the success of a good gamification programme?  
- If companies can renew the use of gamification then this is success - not necessarily monetary terms.  
- Don’t want it to be just something that is tried and dropped by companies.  
- Need to get to the ROI point.  
- Can’t just hear about gamification & plug it on as an afterthought by trying out badges, points etc. need to think very carefully about how it is implemented.  
- You can just slap on and try to increase motivation and user buy in - they will see through it and then not take it up.  
- It’s all about the ‘know how’ of how to implement that is the most important point to take gamification forwards.  
- This is much more important than the ‘tools or cool functions etc’  
- What if gamification is approach to training on enterprise software - teaches you interface as you go. So you can gain points/badges/training. Teaches by this is an app for gamifying enterprise tools and pushing gamification forwards.  
- Gamification is a toolkit, need to know how to use it. Can’t just use leaderboards as you like.  
- For example leaderboards usually only work on top 10% of workforce - most competitive and accepting. Usually make and hyper competitive.  
- If you don’t realise this, then you scare people off. |
### Title: When Innovating, beware of fun pirates

**Presenter:** James Gartner, Spigit  
**Review Date:** 16/07/2012  
**Reviewer:** Fernande van Schelte  
**Video Format:** Talk

**Notes:**
- Industries don't like breakthroughs – they don't pay, risky
- Gartner tasked with innovation in Lloyds and got no take up (not my job) - hence he turned to crowd/employees and engaged them – however, managers didn't like it
- For business to get involved (e.g. managers) you need to make link between product/customer and innovation
- Not build it and they will come – need to market and recruit users
- HR are fun pirates – when rewards budgets, ok; when games for certificates, not
- Terminology is KEY - Do not use gamification, game dynamics instead psychological dynamics, introduce motivational aspects
- Don't lose sight of target audience – e.g. an internal solution for losing business to phones came up with credit card and phone cross – tell crowd and key job solution with live bank account reading, which gave people what they wanted - instant
- Different audiences have different drivers - Transferred programme to government - couldn't pay people for money, they participated because they cared
- Found cheating was more accepted in government application - mob mentality was exhibited.
- Bad behaviour will be there – crowd control needs to be built in – but not obvious
- Each crowd will have their own culture and behaviours – and may not be same as business. Set by first 100 users – if they don’t hit the culture, then you’ll never get it
- Culture is most important predictor of psychological dynamics
- The game needs to evolve otherwise start on high, then people get bored – need element of risk – built for DWP, stake position on leaderboards to gain more
- Game can be simple, non-fussy – need to know target audience
- People never cashed out – intrinsic reward of winning and being seen to play was biggest motivator
- Sell using “system features”

**Example:**
- Innovation market, Lloyds – virtual currency for ideas, participation, comments – aim to be richest person in the bank. Added interesting addons – innovation stockmarket, use virtual currency to buy shares. Then transferred bank-beans to £. Rewa
- E.g. of success – web tiler form success – change where T&Cs checkbox is.
- Icon – rather than voting, you compare for points – gets you onto the leaderboard.

**Strap line:**
You need to sell it to business, users and HR – but the game itself must be well thought out but not complicated

### Title: The Automatic Customer: How to Design User Behavior

**Presenter:** Adeo Ressi from the Founder Institute  
**Review Date:** 02/09/2012  
**Reviewer:** Alexa Briggs  
**Video Format:** Talk

**Notes:**
- Identifying companies as to whether they supply things we need or things we want/mice to have
- Need to focus on habits
- Companies that sell products that create a habit in users move from being a nice to have to a must have item company
- Identify the trigger items, things that make people act
- Motivation, ability and a trigger = a behaviour
- Map your project/task to make sure they have motivation, ability and triggers to get people doing something
- Variable rewards motivate behaviour more than predictable reward
- Rewards are: categories, the tribe, the hunt, the self
- The tribe = social rewards/power
- The hunt = resources, money, information
- The self = mastery and control
- Rewarding these behaviours encourages commitments
- Encourage tiny steps of commitment to build to a bigger commitment

**The Theory:**
- Start with the internal trigger
- Then the external trigger – reaching the user and explain the task/product
- Simple concrete actions
- Variable rewards
- Commitment - how do we make the next cycle more likely to succeed
Title: The game that can give you 10 extra years of life

Presenter: Jane McGonigal
Review Date: 05.08.2012
Reviewer: Natasha Redon
Video Format: Talk

Notes
Jane McGonigal encourages the usage of games because they are improving the quality of life.
According to a study by hospice workers, 61% report expressed on our database, which can be lacked by games:
1. I wish I hadn’t worked so hard – playing games is having fun instead of working
2. I wish I had stayed in touch with my friends – Online games such as Farmhouse encourage social networking. Family members playing games together also have stronger bonds
3. I wish I had let myself be happier – East Carolina University published a clinical trial confirming that games can have a stronger and better effect than antidepressant medication
4. I wish I had the courage to express my true self – Usage of Avatars, mapping how we behave in the real world too
5. I wish I would have lived a life true to my dreams, instead of what has been expected from me – Not sure

Games also have been used to recover from diseases:
- you give yourself an Alias
- you tackle the bad guy (i.e. the harmful things for your disease/situation)
- you collect power-point (i.e. things which make you happier such as going for a walk or hugging your pet)

After the success of this game called SuperBetter, the connection between games and traumatic situations has been analysed.
A result of trauma can not only result in Post-Traumatic Stress, but in Post-Trauma Growth where we make resolutions to do more things that make us happy.
This biological effect can be created without trauma, through the following actions:
1. Movement. Anything that deviates from just sitting down.
2. Cerebral stimulation: doing little mental exercises that focus the mind completely (i.e. counting down per 7 from 100: 93, 86...)
3. Social contact: communicate with people you like or make new contacts. Shaking hands has proven to create a trust-hormone improving the bond between people.
4. Activate curiosity or affection (i.e. look through windows – in or outdoors – or look at baby animal pictures)
5. It has been proven that doing this on a daily basis can elongate the lifespan by 10 years. With an American average lifespan of 78.6 years, this represents a gain of 7.6 minutes per hour!


Title: Let’s use video to reinvent education

Presenter: Salman Khan
Review Date: 05.08.2012
Reviewer: Natasha Redon
Video Format: Talk

Notes
Salman Khan found that teaching through videos watched in a personal and individual environment are more fruitful.
He started by doing maths and physics videos for his cousins, putting them on youtube.
They found great success, even for autistic children.

This has then been used in classrooms, and through the success a whole programme has created:
- children were taught lessons at home through videos, giving the, time to stop when they had issues, or replay the parts they struggled more personally
- time in the classroom has been used for exercises on the learned lessons, where the teacher can interact with the individual children instead of giving a remote speech to the whole class, therefore creating a much more human environment
- lessons are validated through their successful exercises validated in a row. It therefore continues until you always get it right, avoiding passing to the next lessons without having assimilated the previous base
- a platform records everything, the time spent on a video, the passages stopped, the replays, the number of exercises missed and succeeded etc.
- Some information is shown to the students, giving them badges or else for achievements, some information can be shown to the administrator/teacher so that he/she can monitor the students.
- A table can also show which lessons have been completed, which ones have been started etc. so as to see in what area work needs to be done.
- Encourages worldwide support between students too if they can see the strengths and weaknesses from each, supporting each other reciprocally

You can subscribe for free to be an administrator/teacher if you want to use this system yourself.

Khan, S. (2011) Let’s use video to reinvent education. Available at:
**Title:** Engaging Your Enterprise: Driving Greater Sales Performance Through Gamification

**Presenter:** Brian Weimer and Natasha Oxenburgh

**Notes:**
- Definition of success:
  - Result – 75.4% agree
  - High level of usage – 62% agree
  - Software is deployed – 45.3% agree
  - On time, on budget

- Who has figured out engagement?
  - Game designers – 550m people
  - Social networks – 850m people
  - Airlines and hotels – 120m people

- What is their secret? They tap into the basic human needs and motivations.
  1. Progress – Harvard study: employer satisfaction highest influence by how their progress can be measured
  2. Status (job title, the likes and follows, the community, groups…)
  3. Rewards. What is in it for me? Can be material perks, early boarding, reward, acknowledgement.

- There has always been team competition, leaderboards and rewards. Gamification as such is therefore not new, but we are looking at new tools/technology.

- Platform Nitro and Sprout. You need:
  - Rules engine
  - APIs
  - Widgets
  - Admin Console
  - Real Time analytics
  - Easy to deploy
  - Secure and scalable

- Engage the team:
  - Persistence.
  - Progress bar that always stays there. Provides instant feedback.
  - Feature challenge – what tasks? tasks completed?
  - Team leaderboards – display who’s on top who’s not.
  - Show how the leader is.

- Reward people for documentation hygiene etc.
- Trophy area: what trophies you have, and what you need to do to get the next.
- Progress bar – overall and for each challenge
- Use screenpops to engage the user – little image popping up when you won something etc.
- Have a mix of rewards to please everyone

**Title:** Meanful Play: Getting “Gamification” Right

**Presenter:** Sebastian Deterding  
**Review Date:** 20.08.2012  
**Reviewer:** Natacha Redon  
**Video Format:** Talk

**Notes:**
- create a meaningful experience with a storyline  
- create a rule system  
- give them autonomy  
- be mindful of side-effects and unwanted behaviours  
- be aware of social interaction impacts  
- understand the core rules of games  
- understand your users and adapt your model to them  
- build a prototype, play-test it and iterate in the findings. You need qualitative and quantitative feedback

**Detailed:**
Game principles used: make-believe, rules, challenges, goals, feedback, safe play space, shared toys.

Three points in common in Gamification: Give points to track and used for feedback, give badges as goal and reward, Leaderboard defining competition

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<th>Playing</th>
<th>Missing Ingredients:</th>
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| 1. Meaning | Stackoverflew is still interesting and meaningful without the badges and rewards  
Do not encourage to save just an amount of money, but do this to get a house or car etc.  
Use customised goals for the user for it to be meaningful for him  
Has to connect to the user's own interests  
You want to be able to brag about your achievement. You can only do that if it's meaningful  
Whilst games do not give a tangible meaning, they are wrapped into a story and give a virtual meaning you strive towards (saving the princess etc.). You have to have visual support for the story to be believable  
Test in real life if the meanings/contents are awkward before including them virtually |
| 2. Mastery: progress, competency | It's not just about rewards, or the game where you just have to click the button to get points would not be so boring  
Fun comes from figuring out something, solving a puzzle, and the happiness about finding the resolution  
But “fun is just another word for learning” under the optimal conditions  
Cost would be boring if there wouldn't be all the rules  
Goals are also organised and are in a gradual and manageable flow, with increasing difficulty  
Challenges can also be designed with the abilities, not demand too much (resulting anxiety) or be too easy, where we get bored  
Punishments included difficulties to experience failure, leading us to rethink our approach and thus giving more value to the winning experience  
The challenges also need to be varied, not just increasingly difficult (shooting, jumping, then shooting AND jumping)  
Create "lucky feedback" glorifying your success  
Rewards also create the danger of creating unintended emergent behaviour: cheating or abusing the system (when getting points for posting, some might post irrelevant things just to post) |
| 3. Autonomy: being able to explore curiously | Work is what you are obliged to do. Fun is what you are free to do, even if the tasks are the same.  
When creating a “if...then” reward, you create an extrinsic reward (badges, money); you would then feel as if someone wanted you to do this specific task, demotivating you  
You can avoid this by doing the challenges without any strings attached (the more you are active on the website, the more you can individualise you profile, independent from your work at the company)  
You agree on the common goal, but you give free reign on how to do it (make the customer happy. It's up to you how)  
Provide feedback which is helpful to reach your goal, informational rather than controlling, create unexpected rewards |

**How to package it:**
- understand the core rules of games  
- understand your users and adapt your model to them  
- build a prototype, play-test it and iterate in the findings. You need qualitative and quantitative feedback

Title: Interactivity, games and gamification: the gamification of learning and instructing

Presenter: Karl Kapp: assistant director bloomberg university
Review Date: 09.08.2012
Reviewer: Natacha Redon
Video Format: Webinar

Notes
Interactivity leads to better retention than the usual lecture-type of learning
Embed the tasks within a story
Games don’t need to be fun to be educational as long as they are interactive
On-screen characters increase learning and interactivity
Set a challenge rather than just give an objective, and increase the challenge during the process
Allow for different levels to ensure an entrance level adapted to all levels of knowledge and expertise
Using a game is more influential than just reading the same information.
Put challenges into context

Detailed:
Are games effective for learning?
Yes according to Sitzmann[1]:
- 9% higher retention
- 14% higher procedural knowledge
- 11% higher declarative knowledge
when using virtual games instead of traditional discussions or lectures
and 17% more effective than lectures
But it’s not the game itself that increases this, it is the interactivity level, the engagement. Games with little interactivity didn’t function.
Do simulation games have to be educational?
According to Sitzmann again, no they don’t.
Do simulation/games build more confidence for the job application of the learned knowledge than classroom instruction?
According to Sitzmann again, yes. You can get up to 20% higher confidence levels. Because it gives a context.
According to Hay(2), instructional games should be embedded instructional games that include debriefing and feedback.
You can debrief separately or within the programme. They need to see why they play the game, within the context.

Looking at the Empire programme, they engage their employees by creating a training that implies a training partner.
You are in front of a screen, a fictional employee asks you questions concerning the specific challenge, and you partner has to interpret your answer in order to complete this. The answer can be seen as shown on the slide.
A dashboard of feedback is created on the functional, social skills etc.
Recommendations: provide a context, don’t focus on entertainment - learning is more important, create interactivity.
Games can be very expensive, and become all the more the more interactive they become. How to mitigate this? The concept of gamification can be defined as the use of game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems.

We only take IDEAS from games and add them to the current learning environment.

Adobe has created LevelUp to learn how to use Photoshop through little challenges.
According to Locke and Latham[3], you need to use measurement achievements instead of completion achievements to increase intrinsic motivation through feedback. Only reward them for things they actually achieved, not just logging in or something else.
Course Hero uses badges and things like that. You want to use expected achievements to guide the learner towards your goals - Schooler and Anderson[4].

You need receive feedback.
Some people only focus on points, badges and rewards... However, if you look at Progress Wars, you get points just for clicking on the button “perform mission”. This gets you quickly boring.
Interactivity, games and gamification: the gamification of learning and instructing

Character, Role playing, Story, Character, Recognition, Levels, Challenges, Chance, Realizability, Aesthetics, Time, Continual Feedback
Story can be seen as context, narrative.
Carey[5] says that researchers found that the human brain has a natural affinity for the narrative construction (the remember facts better if they are linked within a story).
Even legal arguments are more convincing if they are built into a narrative instead of precedents. Create a story about safety, save success.
First you need to create characters, then a plot, some tension, the resolution and the conclusion.
The success can be compared between NikePlus, where you see how much you run and points and levels, and Zombies Run! It plays in the apocalypse world, where you might encounter zombies on your way pushing you to run quicker etc.
Providing feedback is one of the most tasks presented with an objective in “you will be able to do this...”. This is not interesting!

Jones et al[6], Synchronicity[7], challenges, built on prior knowledge, should become more and more complex.

Recommendations: embed the facts in a story, start by giving a challenge, create increasingly difficult challenges.

Characters: Clark and Mayer[8] tested two groups of people on a problem.
This who had just text performed 30% less than those with a character picture associated with their problem.
Realistic characters don’t facilitate learning more than cartoon character. It should simply be accorded to the audience.
According to Baylor and Kim[9], have a character in front of us, even static, creates more interactivity.

This is even better if there are characters rather than one (maybe motivator and the other expert).
Recommendations: use characters to create a model for the sought behaviour, let them give you feedback, they should be speaking in a natural, conversational tone, use 2 characters: one for explaining one to give you useful information.
Levels: enter at the level you want to (easy, medium, hard, super hard...) so not everyone has the same capability.
You need to do some scaffolding to start easy and creates challenges more difficult as it goes.
Clark et al[10] even say that many of the instructional methods effective for novices have no effect, or in some cases, depress the learning of learners with expertise.
The need a different approach. Demonstration, practice level etc. are all different levels of entrance.
The third level, the playground, is generally where people go, and many who then see that they don’t know how to operate this come back to level 1.
They need to be adapted to whatever level they have.

The game Darwin is Dying, shows characters and how they are suffering from the war, you have to try and give them water, they fight diseases etc. Not a happy game, but does it actually sensitizing people more to the war there? Peng et al[11] proved that those playing the game are more prone to help than those who just read a text giving the same information.
Appendix F - Psychological Dilemmas

The Prisoner’s Dilemma
Two men are arrested, but the police do not have enough information for a conviction. The police separate the two men, and offer both the same deal: if one testifies against his partner (defects/betrays), and the other remains silent (cooperates with/assists his partner), the betrayer goes free and the one that remains silent gets a one-year sentence. If both remain silent, both are sentenced to only one month in jail on a minor charge. If each 'rats out' the other, each receives a three-month sentence. Each prisoner must choose either to betray or remain silent; the decision of each is kept secret from his partner. What should they do? If it is assumed that each player is only concerned with lessening his own time in jail, the game becomes a non-zero sum game where the two players may either assist or betray the other. The sole concern of the prisoners seems to be increasing his own reward. The interesting symmetry of this problem is that the optimal decision for each is to betray the other, even though they would be better off if they both cooperated.

The Tragedy of the Commons
The tragedy of the commons is a term coined by scientist Garrett Hardin in 1968 describing what can happen in groups when individuals act in their own best self-interests and ignore what’s best for the whole group. A group of herdsmen shared a communal pasture, so the story goes, but some realized that if they increased their own herd, it would greatly benefit them. However, increasing your herd without regard to the resources available also brings unintentional tragedy — in the form of the destruction of the common grazing area.
Appendix G - Team Profiles

Alexa Briggs
Programme Manager at Ernst & Young

Scott Blunden
Project and Bid Manager at Thales

Douglas Silva
Secretary of the North East Branch Committee at Association for Project Management

Natacha Redon
Junior Project Manager at Turner & Townsend

Richard Holland
Project Manager at Thales

Laura Beasley
Project Manager at Mouchel Limited

Fernande van Schelle
Sub Contract Manager at Thales

Sachio Baig
Assistant Project Manager at Jacobs UK Limited

Leila Kirk
Project Manager at Mouchel Limited