A gamified approach for engaging teams in corporate innovation and entrepreneurship

Rui Patricio

Universidade de Aveiro, Aveiro, Portugal

Abstract

Purpose – The purpose of this paper is to explain the link between gamification and innovation and describes the use of a particular gamified method and tool, which helps teams get committed and engaged in idea development. The goal is to provide valuable insights on how gamification can accelerate innovation.
Design/methodology/approach – A study was conducted using a combination of qualitative methods: workshops based on action research method followed by semi-structured interviews with workshop participants and problem/challenge owners, representing two segments, corporate innovation teams and entrepreneurship. Data were collected from innovation consultants and IT/Software companies' team members that used this gamification approach to address innovation challenges as well as from an entrepreneurship class from university that also used this particular gamification approach to support an idea competition program.
Findings – The paper provides insights and discusses the major impacts of gamification from the perspective of innovation consultants, corporate teams as well as from young entrepreneurs. It suggests that the application of this gamified method and tool enhances the quality of the idea that is developed to address an outlined innovation challenge. It was also found that team members/participants as a result of this process subsequently developed important innovation and entrepreneurship capabilities.
Originality/value – Despite the growing body of literature on gamification, there is a lack of empirical research that examines the use of gamification tools on companies' innovation and entrepreneurship initiatives. This paper contributes to clarify the contribution of gamified methods and tools toward the success of corporate innovation and entrepreneurship programs by describing the use of a particular gamified approach. Researchers will gain insights into the effects of gamification approaches and a better understanding of the integration requirements with other related research areas. Practitioners will understand how this new method and tool can be implemented in order to drive innovation and entrepreneurship forward.
Keywords Entrepreneurship, Gamification, Innovation
Paper type Case study

1. Introduction

The innovation challenge

Getting the entire organization committed to innovation is one of the biggest challenges in the context of corporate innovation and entrepreneurship. Managing the entire innovation life cycle requires and a strong commitment from all levels of the firm. Besides having engaged employees in entrepreneurial behaviors, coordination is needed at the senior, middle, first levels of management and team level (Kuratko *et al.*, 2014).

It compels the creation of a culture that supports innovative behaviors and capabilities such as creativity, collaboration, experimentation, risk taking, questioning the status quo, a can-do attitude as well as a desire for personal growth and development. This often requires underlying assumptions to be challenged, and the creation of new methods and tools that bring such values and norms to life through visible and tangible symbols and actions. New innovation methods and tools are required to help challenge underlying assumptions and influence desirable behaviors among teams.

Gamification

Gamification can be defined by the use of game designed elements in non-gaming contexts (Deterding *et al.*, 2011) or non-leisure situations to encourage users' motivation, enjoyment and engagement, particularly in difficult and complex tasks. Gamificiation benefits goes

beyond hedonic elements, such as customer and employee engagement (Kumar and Raghavendran, 2015; Robson *et al.*, 2016). It also provides utilitarian benefits for the firm by increasing productivity among employees (Hamari and Koivisto, 2015), improving customer loyalty (Lucassen and Jansen, 2014) and accelerating the product development process (Agogué *et al.*, 2015).

Gamification is a growing and an inevitable trend for industries and organizations that wish to gain a competitive edge. It is a new topic of research that includes many areas of investigation, from economics to sociology, with different approaches, research questions, methods and results. In March 2014, the Institute of Electrical and Electronics Engineers speculated that "85% of the tasks in our daily lives will include game elements by 2020"[1].

Gamification is an excellent method and tool to drive employee participation and engagement in innovation processes since it taps into human desire and its natural attraction for gaming. By providing enjoyable experiences gamification takes employee engagement to a new milestone. A gamified method and tool can influence "good" employee behavior in the workplace. It triggers people's curiosity about innovation, keeps people intrinsically motivated to continuously engage, enhances internal collaboration, promotes greater fun and commitment among employees, increases motivation to learn and grow, provides insights for future areas of product/service applications, increases the willingness to take risks, educates on how to accept failure, promotes openness to new ideas and technologies, among many other behaviors.

Gartner (2012) mentions there are warnings that about 80 percent of current gamified applications will fail to meet business objectives, primarily because processes have been inappropriately gamified. In fact, gamification is not an easy and straightforward process since it requires an engaging user experience focused on clear business goals and a balanced mix of rewards and emotions. However, when implemented correctly, gamification can contribute greatly to the shaping of an innovation-supportive culture.
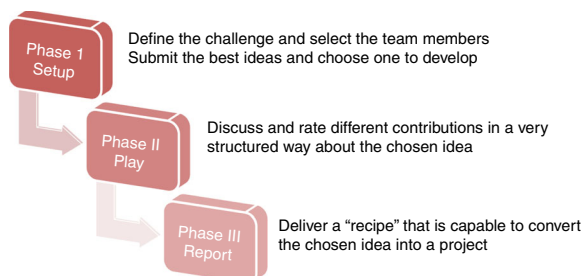
2. ideaChef® method and tool
What is it and how does it work?

ideaChef® is a gamifed method and a tool (a board game that uses cooking metaphors) that was designed to enable teams to convert high potential ideas into working concepts or prototypes. ideaChef® supports convergent thinking by helping to narrow a number of potential solutions down to a "best fit" solution, which provides an engaging and more efficient way of selecting and developing ideas to be pursued further.

This new method and tool has been developed in a very short period of time: between February and June 2015 and it was launched on the market by October 2015. This project was developed with a diverse and international team that applied lean startup principles, involving users since the early stage, prototyping all the components and testing user interface and experience across all the ideation and development stages.

The method is composed of three phases: setup, play and report – see Figure 1.

Phase 1 Setup — Define the challenge and select the team members. Submit the best ideas and choose one to develop

Phase II Play — Discuss and rate different contributions in a very structured way about the chosen idea

Phase III Report — Deliver a "recipe" that is capable to convert the chosen idea into a project

Figure 1.
ideaChef®
project phases

In the setup phase it is up to the project owner to clearly define the challenge and the team, which is going to contribute with ideas to address the challenge. Team members provide their best ideas to address the challenge in an anonymous manner and each member selects one to play.

During the second phase, team members give, discuss and rate different contributions. The highest ranked contributions will be delivered in a structured and visual way (six building blocks dashboard).

Immediately after the play phase a report is written with a "recipe" that converts the idea into a prototype/working concept. Each player's individual objective in the game is to achieve the highest number of points at the end. During the game, several ways on how points can be earned is explained. Nevertheless, the collective and most important objective of the game is to deliver a structured and coherent proposal in tackling the problem (the "recipe"), based on the highest ranked contributions.

ideaChef® is designed for up to six players, requiring a minimum of three. It can be played multiple times by the same team playing different ideas, or by multiple teams playing the same idea. It can be used "on the spot" to address one or several particular challenges. If used consistently, e.g. in a series of workshops over time, it helps to develop entrepreneurial skills and capabilities, reinforce team spirit and shape an innovation-supportive culture.

What does it serve for?
ideaChef® serves to create solutions ("recipes") that address a particular challenge, need or problem, related to either internal processes or to the external market.

When tackling the corporate innovation segment, ideaChef® can be applied to: create a new product/service; address a new service weakness; identify new markets; co-create services/products with customers; create more intimate relationships or engage more with customers; develop new applications; select a technology; prioritize features in upcoming product/service releases; drive product/service roadmap decisions; improve marketing campaigns; gain a better understanding of how value can be created; create strategic plans for organizations or business units; leverage direct customer feedback for market research; identify areas for improvement in internal processes; encourage internal collaboration; redesign an internal process; understand teams better; provide support and strengthen teamwork relationships; among others.

ideaChef® also helps entrepreneurs to develop, enrich and test their business ideas. The direct outcome is a visual report that can be used to pitch the ideas. This method and tool can also be applied to manage idea competitions and hackathons as well as to provide start-ups with mentoring and training in entrepreneurship.

3. Corporate innovation insights

Playing ideaChef® with professionals from different types of organizations provided valuable insights about its main impacts and potential applications. The following testimonials are particularly relevant to the corporate innovation target audience. Inputs were gathered from the perspectives of innovation consultants and innovation teams at IT/Software companies.

From the perspective of innovation consultants, ideaChef® was perceived as an innovative tool that supports innovation in a more open, creative and enjoyable environment. It was also recognized as a way to enhance team spirit, structure projects and shape an innovation-supportive culture:

- "ideaChef is a very innovative tool which can be used to generate more powerful ideas, convert these into results and create more cohesive and responsive teams.

Combined with an experienced game facilitator this simple board game can be an enjoyable and interesting way to get the most out of even the quiet genius-type team members that have so much to offer, but are often overlooked. Having had a small part in its development, I have witnessed firsthand how this easy to play game has even helped transform the team that developed the game itself. Have more fun innovating with ideaChef!" – Consultant, Author and Coach.

- "The game looks pretty interesting and is obviously a nice way to support creative thinking" – Senior Manager Innovation & Technology.

- "I see ideaChef as an introduction tool to modernizing organizations which need to expand on innovation and creativity giving the company its competitive edge by focusing on developing the company culture with Human Capital as the catalyst" – Creative Business Professional.

- "Nice idea to add a pinch of gamification to ideation" – Project Manager Research & Innovation and Design Thinking Lecturer.

- "Rapid entertainment team building to structure a new project. Can be used at a project kick off meeting – allowing immediate surfing of the main topics. Project plan can be the rapid output. It can be used when starting a new project – having pre-formed goals – and stating that is the recipe for successful collaboration across companies – inspired on the well known maxim 'how different people see the problem,' the engineers, the marketing team, the consultant. This tool can help to solve this problem since it keeps everyone aligned and speaking the same language" – Innovation Facilitator and Catalyst.

From the perspective of teams at IT/Software companies, ideaChef® is also perceived as a way to stimulate team building and an enjoyable atmosphere. According to one of the users, being challenged to win the game was clearly a motivation. Besides that, the creative problem solving process was very much appreciated for its structure. Further, balanced contributions from all the team members and outcomes (quality of the "recipe") were also mentioned as key advantages of ideaChef®:

- "ideaChef breaks the norm and provides an alternative means to work on new ideas through a game. It's fun, engaging and provides a sense of competition. Participants engage fully, unlike a regular workshop or brainstorming session where not everybody expresses themselves and it is hard to come up with a conclusion that is representative of the whole group. At the end of the game, ideaChef provides a final report that creates a clear vision representative of the whole group. I highly recommend ideaChef to help create team spirit and build consensus on the best direction to take" – Solution System Manager in an IT company.

- "The most important thing I take from this experience is the opportunity to discuss in a focused manner a real organization problem. So far, it was the most interesting brainstorming experience I was able to participate in. Since we begin with the expectation of 'playing' a game, the discussion flows very easily and in a fun atmosphere, which adds wings to the suggested idea. In the end I had the sensation that a lot of barriers were torn down, and although no direct solution came from the discussion, it was the necessary first step in order to make decisions through problem solving" – Software Engineer of an IT/Software company.

- "I played the game with my team and it was a great experience. It was fun and we managed to get good results in the end. I now have 3 ideas that are part of my 'to do' implementation list" – CEO of an IT/Software company.

- "It was a good experience and the output of the session was very positive! It is indeed a good way to improve brainstorming and to get everyone involved. From the HR perspective, I think it can also be used as a team-building tool. Overall, I think we all had a great time playing ideaChef, at least I did" – Head of Human Resources in an IT/Software company.

- "A week ago, a friend shared ideaChef with me […] First, I thought it would be an evolution of Business Model Canvas, but then I realized that it's not! It's more interesting and exciting, due to it's gamification flavor on top of recognized methods! ideaChef integrates Service Design Concepts with Problem Solving Techniques and Business Innovation. In times of entrepreneurship, this is a perfect tool to take into account" – R&D Manager of an IT/Software company.

- "Playing ideaChef is very motivating! From the moment of choosing an idea to when we see in a structured form the different ideas that were presented through to the final point when we summarized the main conclusions of the game, the mood was always extremely positive. The 4 hours we spent playing passed in a hurry! The discussion and voting moment is very interesting, because everyone receives everyone else's feedback and has a clear feeling of their reactions. It is also motivating to be challenged to win the game, but in the end there is a fantastic feeling that all have contributed to the generating of a solution" – CEO of an IT/Software company.

4. Entrepreneurship case study
The project
This case study provides valuable insights on the use and impact of ideaChef®, particularly relevant to the entrepreneurship target audience.

A university professor integrated the promotion of an extra-curricular entrepreneurship activity into her teaching-learning model in the third year Project Management and Business Planning course unit of the degree in Communication Studies. In her own words "this option allows for the development of a project not only in a specific and specialized context within the class but also in an inter-disciplinary context which promotes contact with other students, places and scientific fields."

Recognizing that these inter-disciplinary teams (comprised of students from different faculties/academic backgrounds) were at different stages in the development of their respective projects, ideaChef® seemed to this professor a flexible enough tool to be able to support and strengthen both the initial ideas evaluation and the decision making as to which option to choose, contributing to the much needed team building.

This professor came into contact with the ideaChef® method and tool during the closing session of the Global Entrepreneurship Week (an idea competition). ideaChef® was the method and tool chosen to help student teams enrich the business ideas with which they would be competing in Global Entrepreneurship Week and it was used during a class in the presence of qualified ideaChef® facilitators.

The results
The ideaChef® session was very productive and enjoyable, leaving participants with a sense of accomplishment by the support given to the projects of the student teams. According to the professor, "without stifling creativity, ideaChef® proved to be a guiding and optimising tool of the available resources and of the results achieved; it leveraged analytical capabilities as well as the establishment of ties and commitment amongst team members."

In terms of skills, attitudes and opportunities for learning, the professor classifies ideaChef®
as "a dynamic interactive pedagogical tool" which she recommended to other departments of the
University and of the Technological Scientific System because "it supports the development of
ways of thinking, of doing, of learning and innovating as a group which will resonate in decisive
moments of the professional/scientific future of the students involved."

The feedback
According to the following testimonials given by team members/students, using ideaChef®
was very enriching and useful for their business projects. Most of them mentioned the
enriching experience of developing their ideas in a creative, fun and playful way. Regarding
the contribution of ideaChef®, users highlighted the value provided by multiple viewpoints
and different angles of analysis.

Feedback on the experience of using ideaChef®:

- Student 1: "The sharing and discussion of ideas for the construction and development
  of a business project through addressing serious and realistic issues in a fun and
  playful way, was very enriching."

- Student 2: "The use of ideaChef® was extremely motivating, entertaining and a
  stimulus of creative thought on the part of each participant. Besides being a "light"
  board game, it also encourages the exchange of ideas between participants and calls for
  a permanent reflection of all the aspects encompassed in the development of a project."

- Student 3: "I liked it a lot. I loved the concept! I believe that the best way to reflect
  upon more series issues is to do it in a creative and fun manner."

- Student 4: "Using the ideaChef® tool was very pleasant. It was interesting to realize
  that even when you already have a business idea it is always possible to improve and
  complement it. Likewise, it was interesting to witness that there are other angles of
  analysis and that the contributions by other players permits the emergence of other
  viewpoints. It is enriching, even from the standpoint of the unblocking or the
  bypassing of constraints or weaknesses that the initial idea may have."

Feedback on the contribution of ideaChef® toward their business project:

- Student 1: "It was very useful for the work group to understand the opinion of
  someone who had no knowledge of our project and, in that way, be able to improve it
  as well as perceive it from different angles."

- Student 2: "ideaChef® contributed in a big way to our business project. Not only did it
  help us develop parts that had not yet been developed, but it also made us think in a
  more creative and proactive manner regarding those parts that had already been
  planned. In this way, it helped us develop our project in a more firm and complete
  manner."

- Student 3: "It helped us to reflect on issues that we had not previously
  thought about."

- Student 4: "ideaChef® is an excellent tool for analysing the various elements that
  comprise a business idea - allowing them to interconnect and become more coherent
  and consistent. In this aspect, ideaChef® permitted a more global view of the idea,
  the identification of alternate approaches, other perspectives and the completion of
  some stages. I consider the game template to be well constructed. It is dynamic,
  motivating and forces you to think holistically about the business idea. The dynamic
  interaction with the other players is also interesting because, besides the competitive
  element, it has a complementary component and adds to teamwork."

Users also provided very interesting suggestions for the development of ideaChef®, such as making the game more accessible, that it should be presented to all the faculty of the university and targeted at university students, student associations and young entrepreneurs.

5. Findings

ideaChef® key impacts

Initially, when this method and tool was designed, the main expected impacts were basically in terms of the output, i.e. the solution (or recipe) that is created and can successfully address the challenge. With time other impacts were identified in terms of its innovation and entrepreneurship capabilities and these were subsequently developed by the team members as a result of this process.

ideaChef® key impacts can be summarized as follow:

- Address challenges in a more structured manner: helping to easily reach a common conclusion, getting everyone on the same page and taking action in the same direction.

- Enhance, enrich and develop ideas: encouraging contributions from all players, in a more balanced manner and gaining valuable insights even from the more reserved team members.

- Create actionable "recipes": generating results that have been developed by all participants and agreeing on the actions to implement from the "recipe."

- Develop critical entrepreneurial and innovation capabilities: promoting debate and accepting opposing viewpoints, taking risks, or cautiously questioning assumptions, explaining things in a different way and collaborating in a more open and engaged manner.

ideaChef® builds actionable consensus regarding the best direction to take, which was one of the main impacts identified by the corporate innovation target audience. Corporate innovation managers also benefit from having a method and tool that develops and strengthens the capabilities of team members in an inspiring, more open and collaborative environment.

When it comes to new product/service development, one of the key impacts is on the time to market. ideaChef® reduces the time to get good ideas to market by effectively converting ideas into prototypes/working concepts.

When tackling the entrepreneurship market, the main impacts for this target audience are related to idea enhancement (ideaChef® helps entrepreneurs to structure their ideas and provides the input for shaping the available ideas and decision on which actions to implement – like the students of the University who used ideaChef® to develop their business ideas) and training (ideaChef® helps to develop innovation capabilities and an entrepreneurial mindset).

ideaChef® critical analysis

Besides recognizing the many advantages of ideaChef® for both corporate innovation and entrepreneurship target audience it still has some limitations.

Minus:

- ideaChef®, like many other game approaches, is not yet broadly accepted in the corporate world and it will take a long time for it to become a mainstream tool;

- its large scale use is limited since it is a physical tool;

- the ideaChef® brand is not as strong and as recognized as many other methods and tools even when it is not competing in the same phases of the innovation cycle (e.g. lego® serious play®);

- still unknown to most of the target customers and users;

- value proposition is somehow difficult to explain since it requires using it in order to understand its value and the type of possible applications; and

- requires detailed communication and demonstration and, in some cases, the presence of a facilitator.

Plus:

- More engaged approach (more transparent, open, collaborative and fun) than all the other available methods and tools.

- Addresses a concrete and important need: provides an effective and engaging way to convert ideas into projects.

- Provides a wide-range of new uses (marketing and communication, human capital, project management). And, additional applications are being identified based on user requirements and lessons learned.

- Cost-efficient since it can be played on-site with a team of just six players and takes only half a day to play.

- The adaptation of an old technology (board game) to twenty-first century key organizational challenges provides the physical interaction that is sometimes missing among teams.

6. Conclusion

This paper contributes to clarifying the contribution of gamified methods and tools toward the success of corporate innovation and entrepreneurship programs by describing the use of ideaChef®. Based on this experience, it makes a lot of sense to gamify corporate innovation and entrepreneurship processes and that is probably why gamification approaches are becoming more widespread among many innovation teams.

Note

1. Source: Technology Advice. Available from: technologyadvice.com/gamification/blog/in-2020-everything-will-be-a-game/ (accessed January 2, 2016).

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Corresponding author
Rui Patricio can be contacted at: rui.s.patricio@gmail.com