Master’s Thesis

The application of gamification in sales

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Abstract

Gamification is a current topic in various fields of application. This master’s thesis is concerned with the question how gamification approaches can be applied to sales processes. The aim was to identify conceivable areas of application for the use of gamification in sales and factors which are important for success. Furthermore it should be examined what requirements for a gamified software solution for the use in sales must be taken into account and which risks and limitations must be considered. It was found that gamification can facilitate better training and development processes in sales, productivity of employees can be enhanced and an improved quality, amount and distribution of data and knowledge can be fostered. Factors for success which were identified are appropriate, clear and measurable goals, an open corporate culture and a positive attitude. A good game design, the use of game elements, a long-term and user-centred approach are important factors as well. Usability and compatibility had been identified as the main requirements for gamified applications in sales. But there are some risks and restrictions which one must be aware of. To these belong legal & ethical considerations, resource related limitations, undesirable effects and internal resistance. Exemplary scenarios were developed to illustrate some use cases for the application of gamification in sales. It can be concluded that the concept of gamification can be a powerful tool to influence the success of sales teams in a lasting and positive way.
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The application of gamification in sales

1. Introduction

Employees largely decide on how productive a company is and employee engagement can be a critical factor for organizational success. High employee engagement levels can foster retention of talent, loyalty of customers and can improve stakeholder value and organizational performance. (Lockwood, 2007, p. 2)

The needs and desires of those generations which enter the labour market today are quite different to those of the past. The members of the so called Generation Y are described as independent, self-reliant, entrepreneurial thinking, who need challenges and appreciate flexibility and freedom (Martin, 2005). They are looking for immediate feedback and a clear direction (Martin, 2005). They want to do meaningful work and have a desire for collaboration (Martin, 2005). Factors such as work-life balance, family, social contacts and personal fulfilment took on greater significance for many people. At the same time, however, themes like self-determination, access to training and career opportunities have become more important (Lockwood, 2007, p. 2). Another important fact is, that this new generation of employees is very techno-savvy (Martin, 2005). Their view and use of technology is different to those of earlier generations (Venkatacharya, et al., 2009).

Venkatacharya et al. (2009, p. 195) argue that:

End-user expectations of enterprise applications have dramatically changed in the last two decades. The changing work landscape throughout the world, brought on primarily by the increasing use of PCs, the internet, and mobile devices at home as well as at work, has created a major shift towards more consumer-driven experiences. […] The enterprise is now playing catch-up to the consumer space, as end users of all kinds are expecting similar experiences in their everyday enterprise applications.
This development will undoubtedly have a major impact on the workplace of the future. As part of this, companies will have to deal with this trend. Therefore, it is about building proper circumstances and an environment which encourages motivation, innovation as well as engagement.

Gamification is an exciting and promising phenomenon, which puts the user or employee in the centre (Kumar, 2013) (Rackwitz, 2014), when designed and implemented correctly. Therefore it might have a lot of potential to shift business software in the future.

1.1. Research Question

Gamification is a very current, but also a very new topic (Werbach, 2014). Thus, in this field only a limited amount of literature is available. In general, there is not much literature or research that deals explicitly with the use of gamification in sales management. However, some potential applications of gamification seem to be examined better than others. In particular, for gamification of training and education, human resources, marketing or healthcare more material can be found. It is quite different, however, when it is about the gamification of sales processes. Although examples and hints can be repeatedly found, there are only a few scientific works or papers that holistically deal with this issue. However, some application examples of gamification can be found, which can be adapted for the use in sales. Already existing best practices will be examined and customized for sales processes.

The aim of this thesis is to examine how gamification can be applied to sales processes in practice. In concrete terms, possible scenarios for the use of gamified sales applications should be developed. In addition to the opportunities and potentials of gamification in relation to sales processes, as well as the limits of applicability must also be clearly determined. Also questions of implementation, realization and design of gamification applications will be investigated. Additionally, legal and ethical issues as well as undesirable negative effects must be considered.
The overall research question for this thesis is therefore the following:

*How can gamification be applied to sales processes?*

In order to answer this research questions there is a variety of sub-questions which must be considered first. First of all, it must be determined which specific areas of application are given for gamification in sales. Subsequently it must be investigated, which requirements are imposed on gamified software in sales. Furthermore, it must be clarified which specific parameters must be given in a company or an organization, so that gamification actually has a chance of success. In addition risks and limitations should be examined.

Thus, the sub-questions are as follows:

*Sub-Question 1:* What are possible fields of application for gamification in sales organizations?

*Sub-Question 2:* What conditions must be given and what are success factors for a gamification approach in sales?

*Sub-Question 3:* What are the requirements for a gamified software in sales?

*Sub-Question 4:* What are the risks and restrictions which must be taken into account when applying gamification concepts in sales?

The aim is to describe possible approaches and scenarios, how gamification can be implemented in sales processes, in a meaningful and sustainable way.
1.2. Relevance

The term gamification is all the rage. Many agencies and consultancies attest significant potential to this approach, but warn at the same time of risks and misconceptions (Burke, 2013). Unfortunately, it is still the case that many decision makers and managers have a completely distorted picture of gamification. It is absolutely essential to discuss the phenomenon gamification in depth to make sure that the core ideas were correctly understood. In general, quite a bit of literature on the phenomenon of gamification can be found, whereby the majority has no scientific validation. Even, studies are rather difficult to find. Carignan and Lawler Kennedy (2013, p. 501) state: “While being a popular topic at the moment, little is known or shared about design best practices or on the outcome of gamification practices in business environments.”

It must be noted that some application areas of gamification are much better discussed and examined than others. Only a very limited amount of literature can be found that interrelate gamification and sales, although quite often references to the application of gamification in sales can be encountered (Blohm & Leimeister, 2013) (Werbach & Hunter, 2012) (Kumar, 2013). Nevertheless, it has never been discussed in more detail how sales processes can be gamified or how gamification can be applied in sales. Thus, this particular topic was marginally a subject of research so far.
1.3. Problem Statement

As in any department of an organization, regardless of whether procurement, production or research and development, there are clearly defined processes within sales departments. Depending on the type, sector, size and culture of a company, these processes may have indeed some variances, but certain core elements should be found in a relatively large intersection. Most companies today are faced with enormous competition and a larger number of competitors (Cron & DeCarlo, 2006, p. 4f).

This is at least not only due to the globalized markets. Thus, efficiency and effectiveness play a crucial role. Therefore, it is extremely important that employees are fully committed to the company's objectives and are highly motivated, since staff costs are a major cost factor (Lockwood, 2007, p. ff) (Cron & DeCarlo, 2006, p. 301f).

Gamification generally provides a variety of opportunities and potentials, which will be discussed in detail with the later chapters of this thesis. Employee motivation and engagement are some key factors which make this phenomenon so interesting. While there are generally some recommendations and best practices for the application of gamification, there are hardly any instructions what to consider when applying it the sales organizations. This raises the question of how gamification concepts can be concretely applied or allocated to basic sales processes.

A variety of stakeholders particularly need to be taken into account and various restrictions and risks must be included in the considerations, when thinking about the application of gamification in an organization. The user or employees can be considered as the most important interest group, as many papers, books and studies suggest that only honest and user-centred approaches actually promise the best chance of success (Werbach & Hunter, 2012) (Kumar, 2013). Concerning the restrictions, ethical and legal requirements as well as technical constraints must be taken into account.
1.4. Overview

The introduction chapter should give an overview and acquaint the reader closer to the topic of the thesis. After a short introduction the research questions are presented and it will be explained why the topic is of relevance. Furthermore, the chapter contains a problem statement. The second chapter is the literature review, which will give an overview of relevant academic papers, other sources and the current state of research in this field. This chapter is essentially divided in three parts. The first part is mainly about gamification. Here the phenomenon gamification is thoroughly explained, critically evaluated and some recent case studies and application examples will be presented. The second part then is concerned with related concepts such as game-based learning or serious games, which are of importance for this thesis as well. In the third part some important principles for gamification from other scientific disciplines are described. The third chapter describes how research was designed, how data was collected, how it was evaluated and analyzed, and what approaches were chosen. The fourth chapter research results is again divided into three parts. First of all, the results of the research are presented and briefly described. The discussion section is used to analyse and discuss the findings in more detail and in relation to what was found in the literature review. In the third part some business scenarios for the application of gamification in sales are characterized. Each scenario is described briefly and presents opportunities and potentials in a compact form. In the last chapter of the thesis the main results are briefly summarized and a critical reflection is made. In addition this chapter contains some recommendations for further enquiry.

Figure 1: Structure of the thesis
2. Literature Review

The chapter literature review serves to define important terms and concepts related to the subject and to explain and describe the state of current research.

2.1. Gamification


Gartner, Inc. (2014) appraises gamification as: “a powerful tool to engage employees, customers and the public to change behaviours, develop skills and drive innovation.” The professional services firm Deloitte (2013) listed gamification in their Technology Trends 2013. Ross Rader, cited in Quitney Anderson and Rainie (2012, p. 4), states that: “Gamification may be the most important social and commercial development of the next fifty years.” Enough reasons to address gamification in more detail.

2.1.1. Definition and description

Gamification can be described as the utilisation of game elements and game design-techniques in non-game contexts. Deterting et al. (2011) defined gamification as: „the use of game design elements in non-game contexts.” This is a common and widespread, but still not a universally accepted definition of gamification. Werbach and Hunter (2012) chose a quite similar approach and define gamification as: „the use of game elements and game-design techniques in non-game contexts.” The first time the term Gamification was used in the way it is used nowadays was in 2003 by Nick Pelling (Werbach & Hunter, 2012). But the term gained real currency first in 2010 (Werbach & Hunter, 2012). For this thesis a relatively loose aggregate definition of gamification is used because the field is relatively new and especially broad and multifaceted.
There are certainly various other concepts, subspecies and phenomena that are interrelated up to a certain point, where borders are still fluent and which have to be gradually clarified by researchers and experts in a scientific discussion. At the moment there is still a lot of discussion (Burke, 2014).

Gamification is used in many different sectors, regardless of whether non-profit or commercial. It can be found in a lot of different areas of application such as sustainability, health and wellness, personal development, finance, education and training, innovation management, employee performance or customer engagement (Burke, 2013), (Groh, 2012). Brian Burke (2013) from Gartner, Inc. states that: “When designed correctly, gamification has proven to be very successful in engaging people and motivating them to change behaviours, develop skills or solve problems.” According to Burke (2013): “Gamification can help make the workplace more engaging and productive because it changes the rules of engagement and inspires employees to change behaviours as a result.”

A lot of different companies successfully applied gamification concepts to marketing, human resources, change management, quality management or sales processes (Werbach & Hunter, 2012). At Microsoft gamification concepts, were extremely successful applied in software testing and quality assurance (Werbach & Hunter, 2012). The software-giant SAP is also concerned with research regarding the gamification of Enterprise-Resource-Planning systems (Herzig, et al., 2012). Various successful and popular gamification applications can be found. To these belong for example Foursquare, Nike+, Foldit, Ribbon Hero and many others (Groh, 2012) (Werbach & Hunter, 2012) (Xu, 2011). However, governments and non-profit organizations have become aware of the benefits as well (Werbach & Hunter, 2012).
Essentially, three different types of gamification can be distinguished: internal gamification, external gamification and behaviour-change gamification (Werbach & Hunter, 2012).

Internal gamification is often used by companies in order to increase productivity of certain departments. This can be about encouraging innovations, to strengthen the camaraderie among the employees or to achieve positive results in a different and new way with the staff. According to Werbach and Hunter (2012), this should work for both, large enterprises and small companies. Productivity enhancement is the key word in this context. In the case of internal gamification it must be noticed that the existing management and reward structures of the firm have to be compatible with the motivational dynamics of gamification. (Werbach & Hunter, 2012)

External gamification is about the involvement of customers or prospective customers and is often driven by marketing objectives. The main goal is to achieve a better relationship between business and the customers. This can mean a stronger customer loyalty, more identification with the product, an increased engagement and higher revenues. (Werbach & Hunter, 2012)

The last of these three gamification categories is behaviour-change gamification. This type is about the idea to change behaviours or habits of individuals or groups for the better. Possible applications are the education system, health care, or financial and pension systems. Often, non-profit organizations and governments make advantage of behaviour-change gamification. (Werbach & Hunter, 2012)
This thesis is mainly about the first type, about internal gamification. There are some typical elements and mechanisms which are attributed to gamification. Those are presented in the following table.

<table>
<thead>
<tr>
<th>Element or mechanism</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible status</td>
<td>Particular achievements are often represented through points, high scores or badges.</td>
</tr>
<tr>
<td>Accessible rankings, leaderboards &amp; levels</td>
<td>These elements are often used to create some kind of competition as a motivating factor</td>
</tr>
<tr>
<td>Quests</td>
<td>A particular task that must be completed either by a single user or by a group. For example a riddle or a task requiring great diligence</td>
</tr>
<tr>
<td>Transparency of results</td>
<td>For the user is absolutely clear, what is expected from him and he knows the impact of his actions</td>
</tr>
<tr>
<td>(real-time) Feedback</td>
<td>Information about how a user is performing and how one can improve. For example a progress bar, or a traffic light</td>
</tr>
<tr>
<td>Epic meaning</td>
<td>This means to be part of something bigger or to do something meaningful</td>
</tr>
<tr>
<td>Cascading information</td>
<td>Only those information are provided which a user needs to complete a certain task or activity</td>
</tr>
<tr>
<td>Community collaboration</td>
<td>Often used to solve a riddle or a problem and to enhance communication. Group dynamics are important in this context</td>
</tr>
</tbody>
</table>
Despite all of the supporters, gamification is not an uncontroversial issue and there is also a lot of criticism. One issue that always causes discussion in the professional world is the term gamification. This implies in many people's view, that a serious activity or a particular business process will be converted into a game. But this is not true in the slightest. The computing pioneer Bob Frankston cited in Quitney Anderson and Rainie (2012, p. 18) states: “It’s really more about rich information than making everything play.” Another good statement comes from Valerie Bock, who is cited in Quitney Anderson and Rainie (2012, p. 18), as she says:

The answer is not to make games of everything, but rather to pay attention to the reasons people are engaged by games, and incorporate features like rapid feedback, recognition for extraordinary performance, and prompt response to mastery at one level with additional, more complex responsibilities at the next, into jobs and learning activities.

In addition, some experts in the field of gamification agree that the term is unfavourable to outline the actual ideas and aspects of this concept. Margaret Robertson (2010) said: “Gamification is the wrong word for the right idea.”

Some critics assume the entire subject to be totally overrated and doubt on the practical use. Among other things, they blame advisory and consulting firms that they use the hype for good business, without necessarily implying a concrete benefit for the actual target group (Bogost, 2011). A Gartner, Inc. survey shows that in the recent past, the majority of to gamification projects had failed or will fail. They predicted that by 2014 about 80 percent of the current gamified applications will not meet their business objectives, due to poor design (Burke, 2013). The reason for that may be fact that it generally is a relatively new topic, which is not scientifically sound yet. Many of the researchers and experts in the gamification field are therefore now trying to eliminate all the misunderstandings and half-truths about gamification. A lot of researchers and practitioners are trying to provide practical guidance and to point out possible hazards or adverse effects in their work.
For example Nicholson (2012) points out some misunderstandings in his research paper and tries to clarify some issues as well.

Another point of criticism, which is always on the table, is the accusation that the addressees of gamification are basically manipulated and it is not dealt honestly with the target group. For example the researcher Danah Boyd, cited in Quitney Anderson and Rainie (2012, p. 5) states: „It’s a modern - day form of manipulation. And like all cognitive manipulation, it can help people and it can hurt people. And we will see both.”

Finally remains to be said that it must be differentiated critically when it comes to gamification. Gamification can have certain advantages in many situations and applications. Nevertheless, it is important to approach the subject with caution. After all, gamification does not make sense in any situation or with any business process, but where it makes sense it can have a lot of potential. P.J. Rey, cited in Quitney Anderson and Rainie (2012, p. 12) has a similar point of view and states that: “Gamification is not appropriate for all applications and may even limit the range of possibilities or potential for customization of certain platforms. Nevertheless, the interfaces of many of the tools we use will be made more effective through gamification.”

2.1.2. Examples of application

The following section deals with gamification in business processes, or enterprise gamification. Various gamification approaches that have been successfully used in a corporate environment are described. Therefor, an intensive research on application examples that have been successfully implemented in practice was done. The field around gamification is very broad and multifaceted. Thus, it is not surprising that gamified applications can be found in different areas. In many cases, applications are already in use which are based on gamification concepts where one would not notice this at first glance. In this section some example cases of successful enterprise gamification are shown, which are interesting for the context of this thesis.
An essential discipline in which gamification concepts are often used is change management. This is for example supported by a Capgemini Consulting document (2013) which states: „We believe that enterprise gamification, when designed and implemented effectively, can help accelerate digital transformation by driving employee engagement and supporting change management.”

After the introduction of a new software solution a medium-sized company had, the problem that this software was poorly accepted and hardly used by the staff. Through a gamified competition around this software, the use of the new event logging system should be encouraged. The usage statistics were thereby increased heavily during the campaign and were afterwards significantly higher than in the initial situation. (Marsh, 2011)

An US-American insurance company succeeded with a gamified social innovation tool to design new and simplified business processes. The ideas for new designs came directly from employees. Participation was voluntary and without extra rewards or incentives. The result was that $ 18 million could be saved per year and additionally employee satisfaction had increased. (Korolov, 2012)

Microsoft’s Testing Division used various gamification approaches in recent years. For example the so called Language Quality game was great success. A simple application was built with the aim to improve software quality. 500,000 screens were reviewed by more than 4,500 Microsoft employees, on a voluntary basis, in order to correct and/or improve the translations. (Jacobs, 2011)

Another example comes from the digital engagement company ePrize. Their goal was to support sales of a new product by the help of internal gamification competitions. The idea was to incentivize sales representatives to increase sales of a recently launches mobile product. Contests were driven by a gamification application. The result was that the ePrize sales force boosted sales of this specific product by 230%. (Marsh, 2013)
The broadcasting and cable company Comcast used a gamification application to enhance the number of appointments booked per day. This worked very well and the average number of appointments booked per day increased by 127%. (Marsh, 2013)

Hewlett Packard (HP) made also successfully use of gamification. They gamified an online portal and wanted to engage HP’s resellers that way. The concrete implementation was a game-based website with e-learning contents, reward schemes and a profile for the reseller. This was called Project Everest and the progress was visualized through a virtual avatar climbing up the so called sales mountain. Impressive results were achieved within the first three months. 950 out of 1200 possible sales people registered for this platform, which is equal to 80%. Furthermore they had a revenue growth of $1 billion, which corresponds to 56.4%. (Call Centre, 2012)

The company LiveOps Inc. runs virtual call centers, and relies on gamification to promote employee engagement and compliance within the organization. With the help of gamified processes, the company has managed to reduce call times by 15% and sales to increase by 12%. (Silverman, 2011)

Another example, where gamification is used in an enterprise context, is human resources. InMobi, an Indian startup company had struggled with very quick growth. The HR team was not prepared for this rapid growth. Then a learning platform in the form of an online social game was developed for orientation of new employees. With this tool, new contracts learned about different aspects of the company, which turned out to be a very effective approach. (Capgemini Consulting, 2013) (Sivadas, 2014)

In addition to the areas already mentioned, also the field of education and training is an example par excellence for gamification. For example, the semiconductor manufacturer Intel has launched a social media and learning platform called iQ. By gamification of digital learning programs learning processes can be accelerated. (Capgemini Consulting, 2013)
2.2. Related areas and concepts

When dealing with the topic of gamification, serious games and game-based learning must inevitably addressed as well. Although the concepts certainly have their differences, they are still related to each other. It is not always easy to make a clear distinction, because the borders are partially fluent or certain terms are often used interchangeably (Susi, et al., 2007) (Corti, 2006) (Kurbjuhn, 2012) (Burke, 2014). In literature for the three phenomena or concepts many different definitions can be found but simultaneously there are some case studies where it comes to overlaps. However, all three concepts are undoubtedly related.

2.2.1. Serious Games

As already mentioned, there is a lot of discussion about the term serious games and no universally accepted definition (Crookall, 2010) (Kracke, et al., 2006). But there are some characteristics that can be named. As the term suggests, those games have a serious background. Unlike a conventional game, entertainment of the player or user is not the primary purpose of those games (Connolly, et al., 2012) (Azadegan, et al., 2012). For instance, Susi, et al. (2007, p. 1) describe serious games as: “(digital) games used for purposes other than mere entertainment.”

Serious games are often used for educational or behaviour change purposes (Connolly, et al., 2012). However, this must not necessarily be the case or the primary goal. They can be used for training, advertising or simulation, too (Susi, et al., 2007). There are many different areas of application, such as government, military, healthcare and also corporate (Susi, et al., 2007) (Stapleton, 2004) (Azadegan, et al., 2012) (Kurbjuhn, 2012). With the help of serious games, user can experience processes or situations which are quite difficult to undergo in reality because of safety, time or cost issues (Susi, et al., 2007). Another positive impact is, that they can enable the user to develop different skills and abilities (Susi, et al., 2007).
Kracke, et al. (2006, p. 305) state that:

Since games have been identified as an opportunity to increase familiarity of the player with any artifacts, they can also be used to mediate experience in management and strategic decision making. In combination with the current trend towards networked games, teaching of strategic decisions in collaborative network environments is the next step in the evolution of learning games.

In order to improve skills and knowledge, corporations have to train their employees (Azadegan, et al., 2012). Azadegan et al. (2012) indicate that companies have high expenses for employee training and traditional training methods can be very costly. According to Azadegan et al. (2012, p. 75): “Serious Games, uses IT-based techniques, is allowing corporations to improve their training of employees, both by engaging them more actively and by testing their comprehension of the information conveyed. Games can be used as training tools for basic corporate situations, or they can be tailored for a particular industry.” Azadegan, et al. (2012, p. 84) suggests that serious games can be used to improve negotiation, decision making and inter-personal skills of employees as well as communication. In addition they (2012, p. 84) state that: “The main perceived benefits of using Serious Games for corporate training are to help companies become more efficient, to improve staff competencies and to make the company more flexible.”

2.2.2. Game-based Learning

Millions of people use digital games as pure leisure activity, without recognizing the associated learning process. The basic idea is to use the learning potential of digital games for educational or training purposes. Similar to serious games there is no generally accepted definition for game based learning. And also the distinction from other concepts and terms is partially rather difficult. The topic has gained greater attention since middle of the previous decade.
To reach the desired learning outcomes, it is not enough to simply place learning contents in a digital game, but rather to intermesh those contents with game mechanics. (Le & Weber, 2011)

Game-based Learning (GBL) can be seen as a branch of serious games. Learning outcomes are a primary goal in this concept. Marc Prensky (2001) suggests that games can be powerful learning tools and which make it possible to create new opportunities for effective learning. Corti (2006, p. 1) argues that: “GBL has the potential to significantly improve training activities and initiatives.” GBL can be used to leverage the power of games in order to engage and captivate users for developing new skills or gaining knowledge (Corti, 2006, p. 1). It facilitates experiencing situations and undertaking tasks which are normally not possible due to several reasons, such as costs, time, safety or logistics (Corti, 2006, p. 1). There are various different fields of application within an organization.

Corti (2006, p. 2) describes various scenarios:

A simulated environment (e.g. the user support desk), a simulated system (e.g. a production line) or a realistically recreated role play scenario (e.g. a sales meeting) can allow learners to experience something that is too costly, too risky or even physically impossible to achieve in the real world.

When applied correctly, game-based learning can be a helpful tool to introduce new skills and knowledge in the work environment (Corti, 2006, p. 2). A major difference between game-based learning and serious games as compared to gamification is, that GBL and serious games take place in a safe environment and do usually not effect reality. Whereas gamification takes place in reality and has immediate effects on it.
2.3. Important principles for gamification

Below two important theories are considered which are regarded as important foundations for the concept of gamification. First, focus will be on the self-determination theory of Ryan and Deci, then on the state of flow of Mihály Csíkszentmihályi.

2.3.1. Intrinsic vs. Extrinsic Motivation

Important basis for gamification are some psychological aspects and theories of motivation. Motivation plays a crucial role in everything that people do. It is not only important which amount of motivation someone applies to a particular activity or task, but also what kind of motivation one is driven by (Ryan & Deci, 2000).

The self-determination theory of Deci and Ryan from 1985 describes the differences between certain types of motivation in terms of motives that cause the respective action. In essence, one can distinguish between two types of motivation, intrinsic motivation and extrinsic motivation. As the word intrinsic already suggests, this type of motivation is about a sense of drive that comes from within. Intrinsic motivation refers to doing something because it is interesting and enjoyable on its own. Extrinsic motivation on the other hand, leads to do something, because a particular outcome or result should be achieved. (Ryan & Deci, 2000)

Many years of research show that the quality of experience and performance may vary significantly, depending on whether someone is intrinsically or extrinsically motivated. In the classical literature for a long time was easily distinguished only between intrinsic and extrinsic motivation. Ryan and Deci go a step further and describe in their self-determination theory different types and degrees of extrinsic motivation. (Ryan & Deci, 2000)
They (2000, p. 56) describe intrinsic motivation as: “the doing of an activity for its inherent satisfactions rather than for some separable consequence.” If a person is intrinsically motivated, one will be much more driven by the fun or a challenge, rather than by external trigger, by a pressure or coercion or by a reward. In any case, intrinsic motivation is an important and profound form of motivation. People are generally intrinsically motivated for certain activities, but not everyone is intrinsically motivated for the same tasks or activities. This fact must always be considered. The self-determination theory deals quite specifically with social and environment-related factors that promote or undermine intrinsic motivation. There is an assumption, that intrinsic motivation, as an inherent tendency, is rather catalyzed than caused when individuals are in appropriate circumstances. (Ryan & Deci, 2000)

Another important theory which also comes from Ryan and Deci is the cognitive evaluation theory (CET). The CET implies that interpersonal events and structures, such as rewards, communication or feedback which strengthen the feeling of competence during an action, increase the intrinsic motivation. Accordingly, it is also predicted that, for example, optimal challenges, success and progress feedback, and freedom from degrading feedback increase intrinsic motivation. Furthermore, the CET also argues that intrinsic motivation can only be increased by connecting a sense of competence with a sense of autonomy. People must therefore perceive their own effectiveness and efficiency, as well as a certain amount of self-determination when intrinsic motivation is to be maintained or increased. In other words, for a high level of intrinsic motivation, the needs for competence and autonomy must be satisfied. (Ryan & Deci, 2000)

Nevertheless, one must always be aware of the fact that intrinsic motivation in such activities only occurs when those are intrinsically interesting for an individual, that means activities which offer a certain degree of novelty, challenge, aesthetics for the individual. (Ryan & Deci, 2000).
Although intrinsic motivation is certainly of great importance, most of the things people are doing, basically, is not intrinsically motivated. Extrinsic motivation is a construct which always applies when a particular result is to be achieved. Another sub theory of SDT, the organismic integration theory was introduced to describe the various forms of extrinsic motivation. (Ryan & Deci, 2000)

### 2.3.2. The state of flow

Gamification draws on many concepts and ideas from different scientific fields, including psychology. In this context the so-called state of flow of Mihály Csíkszentmihályi plays an important role in gamification and can be considered as one of the basic concepts. Csíkszentmihályi was a professor for psychology at University of Chicago and taught business management at Claremont Graduate University in California (Csíkszentmihályi, 1995) (Claremont Graduate University, 2014). In an article in the Journal of Humanistic Psychology he described in 1975 for the first time the phenomenon of flow (Csíkszentmihályi, 1995). A short time later, he published the book Beyond Boredom and Anxiety, which addressed this issue in a more comprehensive form (Csíkszentmihályi, 1995).

Csíkszentmihályi et al. (1990, p. 1) described flow as: „a state of concentration so focused that it amounts to absolute absorption in an activity.” Flow is a state in which one typically feels strong, at ease, at the top of its abilities and can easily control the situation. Furthermore, in the state of flow problems of everyday life or problems with the environment seem to fade into the background, the perception of time is distorted and an exhilarating feeling of grandeur arises. It is argued that from time to time everybody can reach this state and furthermore that most people knows its characteristics. By means of cleverly set challenges, this state can be reached. That is, tasks and activities that are neither too difficult nor too easy for the respective skills and abilities. (Csíkszentmihályi, et al., 1990)
Nakamura and Csíkszentmihályi (2002) jointly named some conditions for the occurrence of flow.

- A challenge or an opportunity to engage in an activity and thereby developing own skills and abilities while to be neither over nor under-challenged. The challenge is thus on a par.
- Clear goals and immediate feedback on the progress and goal attainment.
- A clear focus and concentration on what one is doing in the present moment.
- The merging of awareness and action.
- The loss of reflectiveness and inner uncertainty.
- The feeling that one has complete control over one's actions. This arises primarily from the fact that one knows how to deal with a particular situation and how to act next.
- A distorted perception of time, typically so that time flies faster than normal.
- The experience that the activity is perceived as intrinsically rewarding, so that the process itself might come more to the fore, as the actual goal.

Sports, games and other flow activities usually have clear goals and feedback structures and are therefore more likely to lead to a flow experience. Basically, flow can occur with almost every activity, thus also at work and not only in play or games. Studies have shown that the phenomenon both in the game and in the work environment behaves very similar. (Nakamura & Csíkszentmihályi, 2002)

The fact that the flow state is intrinsically rewarding means that individuals want to feel this flow experience again and again. With the mastery of challenges, learning effects appear and one’s skills and abilities are evolving. A task or an activity is no longer as compelling as before, when it was already successfully done. In order to continuously get into a flow, individuals therefore have to look for new and more complex challenges. (Nakamura & Csíkszentmihályi, 2002)
Csíkszentmihályi developed a model to illustrate the state of flow graphically. Here, the y-axis is termed action opportunities (challenges) and the x-axis action capabilities (skills). This diagram contains the flow-channel, as well as the anxiety-region and the boredom-region.

Nakamura and Csíkszentmihályi also note that simple balancing between skills and challenge are not sufficient. The decisive factor in the concept of flow is much more the idea to develop skills and abilities further. Besides Csíkszentmihályi there are also other authors who have dealt with the issue. Over the years, theories have been constantly evolving and the concept flow was redefined. (Nakamura & Csíkszentmihályi, 2002)
Through successive refinement and expansion, the model now consists of a total of eight different channels (Nakamura & Csíkszentmihályi, 2002).

The further the levels of challenge and skills are apart from the average of a person, the more intense the respective channels are perceived (Nakamura & Csíkszentmihályi, 2002).

Figure 3: The current model of the flow state, Source: (Nakamura & Csíkszentmihályi, 2002)
3. Research Design

The following chapter deals with the research approach and the methodology of this thesis. Here research philosophy, research approach, methodological choice, research strategy as well as data collection and data analysis will be described successively.

![Research Onion Diagram](image)

*Figure 4: The research onion, Source: (Saunders, et al., 2012, p. 128)*
3.1. Research Philosophy

For this thesis Interpretivism was chosen as research philosophy. The world of business and management is very complex. Therefore it would not be a good approach to try to create law like generalizations. Some researchers argue that such rich insights into a complex world are lost if such complexity is reduced to a series of generalizations. Important with regard to the interpretivist philosophy is that an empathetic stance has to be adopted.

It is crucial to get insight into the world of the research subjects, to understand their perceptions and derive an understanding of their environment. An interpretivist perception is appropriate for business and management research. Business environments and situations can be very complex and they also can be considered as unique. (Saunders, et al., 2012, p. 137)

Table 2: Interpretivist philosophy in business and management research, Source: (Saunders, et al., 2012, p. 140)

<table>
<thead>
<tr>
<th>Description:</th>
<th>Interpretivist philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology:</strong></td>
<td>The researcher’s view of the nature of reality or being</td>
</tr>
<tr>
<td></td>
<td>Socially constructed, subjective, may change, multiple</td>
</tr>
<tr>
<td><strong>Epistemology:</strong></td>
<td>The researcher’s view regarding what constitutes acceptable knowledge</td>
</tr>
<tr>
<td></td>
<td>Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivation actions</td>
</tr>
<tr>
<td><strong>Axiology:</strong></td>
<td>The researcher’s view of the role of values in research</td>
</tr>
<tr>
<td></td>
<td>Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective</td>
</tr>
<tr>
<td><strong>Data collection:</strong></td>
<td>Common or most often used techniques</td>
</tr>
<tr>
<td></td>
<td>Small samples, in-depth investigations, qualitative</td>
</tr>
</tbody>
</table>
3.2. Research Approach

When considering the three different research approaches deduction, induction and abduction, the last one was found to suit best for this context. Saunders, et al. (2012, p. 144) states that: “In an abductive inference, known premises are used to generate testable conclusions”. Furthermore, they (2012, p. 144) suggest that with this research approach collection of data “is used to explore a phenomenon, indentify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth”. Furthermore theories can be generated or modified and existing theory can be incorporated where appropriate (Saunders, et al., 2012, p. 144). Abduction is therefore an appropriate research approach, because there is a lot of theory for gamification in general, but not for gamification or related concepts in the context of sales processes or sales organizations. So these generic theories can be used as a basis and can be extended or modified to conceptual framework for the application in sales. Saunders, et al. (2012, p. 163) indicate that in practice a lot of qualitative research follows an abductive approach.

3.3. Methodological Choice

As already mentioned, in this specific field only a very limited amount of research was done yet. The aim is to examine how and in what form gamification concepts can be applied to sales processes. To this end, a qualitative approach seems to be more adequate than a quantitative approach, especially since there might be very limited number of participants that come into question for the collection of quantitative data. A disadvantage that often comes with a qualitative approach is the fact that it analyzes only a specific section, but does not show the whole picture. But this argument can be weakened due to the fact, that there is a very small size of potential participants which are knowledgeable about sales and gamification. Therefore a mono method qualitative study was selected. Saunders et al. (2012, p. 163) state that: „The success of the researcher’s role is dependent not only on gaining physical access to participants but also building rapport and demonstrating sensitivity to gain cognitive access to their data."

[26]
3.4. Research Strategy

For this thesis grounded theory from Strauss and Corbin was used as research strategy. Saunders, et al. (2012, p. 569) state that: “The emphasis in Grounded Theory Method is to derive meaning from the subjects and settings being studied.”

According to Strauss and Corbin (1990, p. 419) the data for a grounded theory can be collected from various sources, however interviews are a very common source. In grounded theory data collection and analysis are processes that are interrelated. That means that the analysis begins with the first bit of collected data. This permanent analysis leads the way for the upcoming interviews. In order to capture every potentially relevant aspect a systematically and continuous data collection and analysis takes place. (Strauss & Corbin, 1990, p. 419f)

Concepts can be understood as the basic units of analysis. In this context, conceptual labels are designated to incidents, events or happenings which were analyzed as potential indicators for a phenomenon. As the research process continues and similar incidents are discovered, those are labeled with the same title. (Strauss & Corbin, 1990, p. 420)

Strauss and Corbin (1990, p. 420) describe another process in which “Categories must be developed and related.” Categories contain related concepts which provoke or foster a certain phenomenon. Those categories can be seen as more abstract concepts on a higher level, which are developed through the same analytical process of comprising for similarities and differences. (Strauss & Corbin, 1990, p. 420) Another important characteristic of grounded theory is that sampling proceeds on theoretical grounds (Strauss & Corbin, 1990, p. 420).
3.5. Data collection and data analysis

In the following sections will be explained how the data was collected and analyzed.

3.5.1. Semi-structured expert interviews

Semi-structured expert interviews have been used for data collection. Interviews are a common method in the context of research on business and management. The crucial point here is that in this area primarily people have the data and the knowledge about why things are the way they are, why they happen and what intentions behind them. To obtain research data in the field of business and management, it is therefore important to talk to people. (Adams, et al., 2007, p. 144)

The interviews deal in a wider sense with the research question of this thesis: How can gamification be applied to sales processes? The aim is to explore with the help of interviews where experienced experts see capabilities for gamification-based applications in sales. The exploratory nature of the interviews is conditioned by the fact that this specific subject was barely examined so far. With help of the interviews should be determined how gamification concepts can be embedded in sales processes or to which sales processes they can be applied. As described in (Adams, et al., 2007), the interviews are not used to answer the research question directly, but rather to create the necessary fundamentals in order to answer the research question. Although the interviews have an explorative character, they follow a semi-structured design. There are essentially two reasons for that. Firstly, a broad field of question is to be covered and no question should be left behind during the interview. Secondly, the semi-structured design should facilitate a comparability of the individual interviews, so that in the later stages an appropriate evaluation can be carried out. Only if the interviews are designed equal, peculiarities, similarities and significances can be uncovered and exposed. Although the expert interviews provide deep insights into the subject matter, they have the disadvantage of small sample sizes and put high requirement on the researcher as well as on the participants (Adams, et al., 2007, p. 111).
3.5.2. The participants

In order to find participants for the study an announcement in the business network XING was placed (see Appendix C). Furthermore the Internet was scoured for appropriate participants, which then were contacted via e-mail or via telephone. The idea was to consider the subject from different angles. This should help to better explore the capabilities and potentials and to simultaneously have a look at the risks and limitations from different perspectives. Therefore, two different groups of participants were interviewed. On the one hand participants with a sales background and on the other hand participants with extensive knowledge in the field of gamification. For both groups a separate interview guideline was prepared, each involving a series of questions and which served as a rough frame (see Appendix A and B).

Since the topic of gamification is still very new, it was very difficult to find participants that have both a background in sales, as well as in the field of gamification or with the related areas. However, all interviewed experts with sales background had already gained experience with gamification, game-based learning or serious games. Furthermore they had as a matter of course a very extensive knowledge and a deep insight into the process structures in sales. Participants with gamification background had either already made and experiences with gamification projects in sales, or could produce deductions from case studies or other field of application. The two groups of participants were thus appropriate to transform the concept of gamification and to make suggestions for which application areas within sales organizations gamification might be adequate. Two of the three participants with sales background had more than 25 years experience in sales (Kleinschnittger, 2014b) (Wiesner, 2013). The third participant with a background in customer relationship management is founder of the Initiative Game Studies (IGS) (Initiative Game Studies, 2014), to which also one of the participants with gamification knowledge is committed to. The two other participants with a very comprehensive background in gamification can be referred to as two of the top 15 most influential gamification gurus (See Appendix D) (Beresford, 2014).
3.5.3. The interview guidelines

As already described in the previous sections, guidelines for the interviews were developed. These served as a rough framework and should firstly ensure that no important points are forgotten and secondly that the interviews follow a certain structure that makes them comparable afterwards. The guidelines for the two groups of participants differ, however (see Appendix A and B).

All guidelines contained a general section for the introduction of the interview. This first part of the interviews allowed the participants to introduce themselves and to describe their professional background. These questions helped to better assess and understand the participants and their fields of activity.

The guideline for the participants with sales background contained additionally some questions that relate to the particular sales organization of the company which they are working for. For example, how sales processes in the respective company are structured, or what type of software is primarily used. This part was also intended to learn more about the interview participants and their business environment so as to identify possible starting points.

Another part, which was used again in both guidelines, is concerned with gamification in particular, or the application of gamification concepts in sales organizations. This was used to define a common understanding of the issues and to explore what knowledge or experience the interlocutor has already gained with gamification. The questions out of this part are largely based on the research questions. The aim was to determine where the participants see applications for gamification in sales, where they see difficulties and risks, what requirements that they consider to be particularly important, etc. In addition, the interview participants also had the opportunity to express some opinions, ideas and future assessments.
3.5.4. Planning and conduct of data collection

For the master's thesis, a total of six semi-structured expert interviews were conducted. These interviews followed a certain structure, but nevertheless had an open character, so that the experts had an active influence on the course and the content addressed in the interviews. The interviews were intended to get some general opinions and perspectives from professionals, practitioners and academics on the subject of gamification, especially with regard to the use in sales. Here, the experts should be able to comment on the potential and limitations and dare some future forecasts.

All conducted interviews lasted between 55 and 70 minutes. The interviews were conducted either via phone or the Voice-over-IP service Skype. Preliminary consent was obtained from the interview participants to be able to record the conversation which would then allow a better analysis. In addition, notes in bullet point form were taken during the conversation. Fortunately, all participants agreed with the recording of the conversation, so this could be done using a software voice recorder.

3.5.5. Data analysis

At first the recorded audio material had to be transcribed for the analysis of the data. Transcription was usually started immediately after the completion of the interview. In a first step all relevant contents were transcribed as accurately as possible.

Then three coding procedures which were suggested by Strauss and Corbin were carried out.

![Figure 5: Coding procedures](image-url)
Open coding: For the open coding the collected data was disaggregated into conceptual units which were then provided with a label. Similar units of data were captioned with the same label or name. Such a unit of data could comprise a few words, a line, a sentence or even a paragraph. In a first step the result then was a multitude of conceptual labels. The multitude of code labels which were created had to be analyzed, compared, structured and sorted into related categories. This categorization of data helped to identify significant concepts and themes and also helped to figure out in which areas the data collection had to be focused. (Saunders, et al., 2012, p. 569)

Axial coding: Axial coding was used to find relationships between the categories of data that arose from open coding. The categories were rearranged into a hierarchical form, with sub-categories, when a relationship between them was found. Saunders, et al. (2012, p. 571) state that: “The essence of this approach is to explore and explain a phenomenon […] by identifying what is happening and why, the environmental factors that affect this (such as economic, technological, political, legal, social and cultural ones), how it is being managed within the context being examined, and the outcomes of action that has been taken.” The aim of the analysis is to explain the relationships between these categories or aspects. The recognized relationships had to be verified against actual data that already had been collected. (Saunders, et al., 2012, p. 571)

Selective Coding: The last stage of coding is selective coding. In this stage relationships between the major categories that had emerged from the grounded approach are developed (Saunders, et al., 2012, p. 572). This type of coding usually is usually performed in the later phases of a study. The process is about unifying all categories around a so called core category (Strauss & Corbin, 1990, p. 424). The core category can be understood as the one that describes the central phenomenon of a study (Strauss & Corbin, 1990, p. 424). It represents the main analytic idea of the conducted research (Strauss & Corbin, 1990, p. 424). Furthermore Straus and Corbin (1990, p. 424) suggest to fill categories with descriptive detail that need further explication.
4. Research Results

This chapter is essentially divided into three sections. The first one is presentation and analysis of findings, which gives a short overview of the research outcomes. This is followed by the section discussion in which the findings are analyzed in more detail and in relation to the data that was found in literature. Then in the last of the three sections, some exemplary scenarios are derived which should convey an idea how gamification might get used in sales.

4.1. Findings: Presentation and analysis

In this section of the master’s thesis the results from the data collection are briefly described and explained. With the help of semi-structured expert interviews, the sub-questions which were described in section 1.1 have been answered. All these questions should help to answer the overall research question for the master's thesis: How can gamification be applied to sales processes?

The data gathered from the interviews was analyzed with multiple coding procedures as described in the previous chapter. Related to every sub-question several major categories have been identified. The subsequent table presents these major categories and provides information in which interviews and how often these categories were addressed.
Table 3: Overview of interview contents

<table>
<thead>
<tr>
<th></th>
<th>Interview 1</th>
<th>Interview 2</th>
<th>Interview 3</th>
<th>Interview 4</th>
<th>Interview 5</th>
<th>Interview 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Areas of application</strong></td>
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<tr>
<td>Training &amp; Development</td>
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<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
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<tr>
<td>Productivity Enhancement</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Knowledge &amp; Data</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td><strong>Key success factors</strong></td>
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<tr>
<td>Clear objectives</td>
<td>✔</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Long-term and user-centred approach</td>
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<tr>
<td>Game Design &amp; Game Elements</td>
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<td>✔</td>
<td>✔</td>
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<td></td>
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<tr>
<td>Culture &amp; attitude</td>
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<tr>
<td><strong>Requirements</strong></td>
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<tr>
<td>Compatibility</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Usability</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Risks &amp; restrictions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal &amp; ethical considerations</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Ressource related limitations</td>
<td>✔</td>
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<tr>
<td>Undesirable effects</td>
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<tr>
<td>Internal resistance</td>
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</tbody>
</table>
In the following, major categories and associated concepts related to the four sub-questions will be presented. The first of the four sub-questions revolves around possible applications for gamification in sales. In order to answer this question the participants were asked where they see applications or potential for gamification in sales. Furthermore they were asked for which tasks or processes within a sales organization they would assess gamification approaches as reasonable.

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Associated concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training &amp; Development</td>
<td>Sales Training, Product Training, Process Training</td>
</tr>
<tr>
<td>Productivity Enhancement</td>
<td>Employee engagement, Motivation, Process Efficiency</td>
</tr>
<tr>
<td>Knowledge &amp; Data</td>
<td>Knowledge Sharing, Market &amp; Customer Data, Innovation Management</td>
</tr>
</tbody>
</table>

In almost every conducted interview the topic Training and Development was mentioned as a possible field of application for gamification in sales. Most of the participants saw a lot of potential in this regard or even had already made positive experiences with this. Mario Herger (2014), one of the leading international experts in the field of gamification confirmed that Training and Development is one of the most important areas of application within sales organizations. The concepts associated with Productivity Enhancement were also mentioned very often. The third major concept which emerged revolved around the collection, use and sharing of data and knowledge.
The second question was intended to find out what factors are important regarding gamification in sales. Therefore the participants were asked which factors they think are important for success and why? The following categories and concepts emerged.

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Associated concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear objective</td>
<td>transparent, measurable, appropriate and realistic goals</td>
</tr>
<tr>
<td>Long-term and user-centred approach</td>
<td>always new and up-to-date content, new challenges, proper difficulty level, good balancing</td>
</tr>
<tr>
<td>Game design &amp; game elements</td>
<td>approach that involves and fascinates users, game mechanics, interactivity</td>
</tr>
<tr>
<td>Culture &amp; attitude</td>
<td>Open corporate culture, positive attitude, collaboration of different departments</td>
</tr>
</tbody>
</table>

Most of the participants stated here that it is absolutely essential to have clear and realistic objects. Furthermore these goals must be measurable and it must be differentiated, because gamification is not suitable for every problem as a solution. Another topic that came up was that primarily long-term and user-centred approaches make sense. A lot of interview partner also suggested that good game design and the use of game mechanics might be vital. In addition some of them pointed out that culture and attitude within a company or an organization play an important role when it comes to the implementation of a gamification project.
In addition, specific requirements for such gamified applications in sales should be examined and described. So it was asked which requirements or expectations the participants have regarding such applications.

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Associated concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability</td>
<td>Self-explaining structure, user must know what is expected of them, simplicity, clear goals for interaction, easy handling, intuitive design</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Compatibility with other applications, compatibility of data, processing the data, readability</td>
</tr>
</tbody>
</table>

With regard to this question the two major categories usability and compatibility emerged in the course of the interview. Usability was the main point which was mentioned. Some participants stated that if software or an application has no good usability it will not be used that frequently or it is less likely that it will be used. To that extent this was an important point for many of the interview partners. Some participants also claimed compatibility as an important requirement. This is related to the fact that certain data is only useful if it could be processed further.
Another question dealt with risks and restrictions associated with gamification concepts. The participants were asked where they see difficulties or risks in the implementation of gamification projects in sales. The following table provides information about categories and concepts which were identified.

<table>
<thead>
<tr>
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It was noticeable in any case, that although the interviewed participants had a positive attitude concerning the subject gamification, they also made critical remarks and pointed out various risks and limitations. Interlocutors who have already had experiences with gamification or game-based learning, or who have deployed such projects within an organization, indicated that those concepts had been well adopted by employees and partners, and that there was mostly very positive feedback.

The data determined through the interviews and the results from the literature review will be interrelated and categorized in the next chapter of this thesis.
4.2. Discussion

In this section the findings from the literature review and those of the own data collection, that is, from the conducted interviews are coalesced. In the course of this section the knowledge and findings from literature review and those of the semi-structured interviews will be interrelated and aggregated. These two data sources in principle do not necessarily build on one another. Nevertheless they are in mutual interaction. The information collected from the literature review of course had an impact on the design of the interviews and furthermore these data plays an important role in this section again. Through the interviews, the contributions from the literature could be verified and rounded off regarding the sales context. First of all objectives and areas of application will be discussed, and then followed by success factors, requirements and finally risks and restrictions.

4.2.1. Objectives and areas of application

Figure 6: Objectives and areas of application for gamification in sales
Through the semi-structured interviews and literature review as described in the previous chapters specific goals and applications for gamification in sales should be found. In analyzing and evaluating the data, the three major categories Training & Development, Productivity Enhancement and Knowledge & Data were identified. These three major categories will now be described in closer detail. Furthermore underlying associated concepts as well as different characteristics are addressed.

4.2.1.1. Training & Development

One of the major and medium-term most promising application areas for gamification or game-based learning in sales might be the training and development. The facts that in literature comparatively much material was found to this particular topic, as well as that this was discussed in almost every conducted interview verify the importance of this field of application. The goal here is to utilize the concept of the medium game to achieve better learning outcomes. The appropriate use of game elements can help to enhance employee knowledge and skills which then could foster a more productive workforce (Corti, 2006, p. 9). Minović, et al. (2013, p. 146) highlight that: “In contrast to all existing media, games have the opportunity to interact, allowing the user to actively participate, not just passively receive information.” Van Eck (2006, p. 4) states that: “Games are effective not because of what they are, but because of what they embody and what learners are doing as they play a game.” The three associated concepts sales training, product training and process training, which emerged in this context, are now described in more detail.

Product-Training: Intensive product knowledge is vital for sales representatives and account manager. Only with the appropriate expertise and product knowledge successful consulting and sales conversations can be done. On the one hand convincing sales arguments can be developed through good product knowledge. On the other hand an extensive knowledge in terms of products and portfolio might be necessary to advise customers in a proper way. This is especially the case with technically sophisticated products.
Often, sales representatives must be able to compose suitable product combinations or have to find the right solution on the basis of fixed specifications for a customer (Herger, 2014) (Rackwitz, 2014). All of this is of course only possible with a deep understanding and knowledge of the product lineup. This issue may not only relate to own sales staff, but depending on how the sales organization or the distribution channels are structured also to partners, service providers, distributors or other resellers (Güldenberg, 2014). It might be that these partners need intensive product training to successfully distribute products or services to their customers. Especially when several levels of trade are involved in such a chain, particularly strong benefits could arise. Corti (2006, p. 9) confirms that and suggests that game-based learning: “can be used to help your customers and channel partners gain a comprehensive understanding, for example, of your product and service portfolio.” For example the German QSC AG, which is a network provider and IT service organisation, successfully made use of such an approach (Güldenberg, 2014). Customers and consumers today are much better informed (Güldenberg, 2014) than they were a few decades ago and therefore also significantly more critical. All the more important are therefore selling points and a solid consulting expertise.

**Sales-Training:** Another specific case of application that was found is sales training. This means the specific training of sales representatives and account managers regarding sales conversations and negotiation situations. Nowadays most sales organizations are very KPI driven. Sales people are often faced with well experienced and well trained buyers in sales negotiations. In order to keep pace with that, it is necessary that the sales force is adequately trained and prepared for such discussions or negotiations. With the help of interactive simulations and trainings, such situations can be specifically trained. There are many different approaches conceivable such as training of psychological aspects, negotiation strategies, as well as the analysis of market data and figures. The aim is to create interactive training environments potentially with game elements instead of using predominantly figure-based or scholastic approaches. (Kleinschnittger, 2014a) Thomas Kleinschnittger (2014a) confirmed that participants deal much more intense with a negotiation process in such simulations.
For example Bridge Builders which is an agency for sales development uses a business simulation called StoreWars to train and develop sales representatives (Kleinschnittger, 2014a). Corti (2006, p. 9) states that: “Using the compelling power of games to engage people, serves as a powerful tool to overcome any initial reluctance to engage in training, and keeps users actively engaged for longer.” A clear advantage of this theme is that the participants or player take action themselves and influence events through their own decisions. So own and sustainable learning experiences can be made within a secure environment. Individual actions or decisions can be accurately analyzed, so that if necessary, the behavior can be corrected and improvements can be pointed out. The respective behaviour can be encouraged if the right decisions were made. Using such approaches, both rational and data-based decisions can be practiced, as well as psychological aspects in the negotiations. When a certain situation has been trained, it can convey a sense of security and serenity, so that in a real environment, decisions can be made calm and prudent. One advantage of this type of training program is that if the initial investment is once made for the program, the follow-up costs stay within predictable limits. (Kleinschnittger, 2014a)

As Kracke, et al. (2006, p. 312) describe:

Besides, the fact that human players have to deal with each other makes negotiations more realistic and even the personal aspect of inter-organizational collaboration is automatically present. The second major element is the free decision making, which omits querying the player to react on discrete events. Instead the players have to be pro-active and maintain an overview over their virtual environment and assess the current situation.

In general, game-based concepts can be a useful tool for the training and development of employees. This is evidenced by numerous examples as pointed out in the literature review. Thus it can be assumed that such training and development activities might be successful in a sales environment.
Process-Training: The last case of application within the category training and development is process-training. In this case a distinction can be made again. Firstly process training can relate to processes in which a customer is involved and secondly to purely internal processes. Questions in this context can be about, what is the general order processing from? What questions need to be asked in order select and offer the right product? What information does the company require, to prepare contracts from customers? What information and data required is by the customer? Are there any precautions that have to be made regarding scheduling, delivery, etc.? Are there any legal issues to which the customer has to be pointed? In this way company-specific sales process chains can be illustrated and practiced.

The other processes deal with tasks and activities that are executed directly by the sales staff and must be learned and internalized when a vacancy is filled. This could be for example about requirements and conditions for price calculations, about the use of certain software or filling out specific forms. The essential point is to prepare an employee as quick and as comprehensively as possible to his field of activity. Every sales environment is different. Therefore, such a gamified training can be a helpful tool to train new contracts regarding several sales processes. Corti (2006, p. 9) also makes this point and suggests that game-based learning: “can be used to introduce new hires to your company and, for example, your products and services and the market characteristics that you operate within.”

It must be noted that the Training & Development case of application rather has to be classified as a form of game-based learning or serious games, than as gamification. These trainings and learning environments take place in a secure environment and have no concrete effect on reality (Rackwitz, 2014).
4.2.1.2. Productivity Enhancement

Also for Productivity Enhancement several associated concepts were identified that are now explained in more detail. These associated concepts are employee engagement, motivation and process efficiency.

**Employee Engagement:** Many different mechanisms in the concept of gamification can help to increase the employee engagement. Noll Webb (2013, p. 608) suggests that “There are a number of reasons to believe that acceptance of gamification will grow in the enterprise space. The most likely reason is that companies are increasingly concerned about the effect of employee engagement on productivity.” There are a lot of reasons why employee engagement is so important for an organization. The level of engagement has impact on how hard employees work, how productive they are and how likely they are to go the extra mile for a company (Lockwood, 2007, p. 3). Engaged employees are considered to be more loyal and stay longer with the organization (Lockwood, 2007, p. 3). Furthermore Lockwood (2007, p. 4) asserts: “When employees feel more engaged in their work, the climate is better for service and the customer receives better-quality service, thus promoting customer loyalty.”

Kumar (2013, p. 529) for example argues as following:

While effectiveness, efficiency, and satisfaction are worthy goals, gaming and gamification extends and adds increased engagement to these goals. In the context of a game, players voluntarily seek challenges to enhance their playing experience. They seek empowerment over efficiency, delight, and fun over mere satisfaction. These factors increase their level of engagement in the game.
There are a lot of principles within the concept of gamification which can facilitate employee engagement, for example information transparency and real-time feedback. These components provide rich information and reveal ways how improvements can be achieved, which can be a great motivation. Gamification can also help to make everyday work more interesting and exciting (Piechulek, 2014). Certain activities or tasks can be designed more interesting and challenging. Gamification describes the approach to make software or even processes more simple and user-friendly, so that the work is enjoyable and at best makes more fun. Mario Herger (2014), one of the pioneers in the field of gamification, speaks in this context of: „Make Work more Fun“. If processes are aligned to the needs and requirements of the users and thus more ergonomic and pleasant, it is likely that this increases the commitment of employees. Noll Webb (2013, p. 613) for example confirms that: “Gamification can be a powerful way to increase employee engagement and productivity within an enterprise software system.” Furthermore it is argued that gamification can lead to enhanced communication, more collaboration and team work as well as a better corporate culture. All these factors may positively influence employee engagement.

**Motivation:** Motivation is a factor which can considerably affect productivity. The aim is to stimulate the motivation of the employees so as to increase the productivity with the help of gamification. There are a lot different concepts used in gamification which can lead to increased motivation.

The factor competition can be a powerful tool to increase motivation. In the recent past, many gamification applications were among other things based on competition. In the right environment and atmosphere of small competitions can be a nice variation to breathe new life into an organization. In such challenges or competitions individuals or whole teams can compete against each other. For some people it can be a great driver for motivation to jump on top of a ranking or to crack a high score. There are various different structures and setups conceivable for such competitions. However, one must be very careful here, since this is a double edged sword. (Piechulek, 2014) (Rackwitz, 2014)
This issue must be always considered critically, both on moral and ethical grounds, as well as for reasons of long-term and sustainable success. This approach can for sure make sense up to a certain point, but should always be treated with caution. Some people might really benefit from some kind of competitive environment while others do not. (Herger, 2014)

But also collaboration can significantly contribute to productivity or increase the performance of a sales organization. Some of the participants saw great potential here to establish meaningful and sustainable structures in sales organizations. This approach stands in stark contrast to traditional competitive approaches, which seem to be still very common. It follows the assumption that, by the collaboration and teamwork in a sales force all employees can be more successful, if they help and motivate each other and try achieve higher goals. The core idea is, that if all employees are successful, a better overall result will be achieved as if only some top-seller shine. Group dynamics play an important role in this context. (Piechulek, 2014) (Rackwitz, 2014) (Herger, 2014)

Another concept which can lead to increased motivation is the goal or the inducement to improve oneself. An essential trait of gamification is that it allows immediate feedback and performance can be visualized very well. This visualization of performance can certainly help to increase the motivation, because one has a clear goal in mind or can identify potential for improvements. This factor may cause a desire for improvement among employees. If one knows exactly where he stands new goals and challenges become clearer. This desire for improvement, for example, to a particular prior period, can of course be applied to groups or teams as well. This way it might be possible to create approaches to enhance the overall team performance and to reach a new peak performance. (Piechulek, 2014)
**Process Efficiency:** Gamification can help to change processes and also to develop more efficient processes. In many cases gamification is associated with process changes. This can essentially happen in two different ways. Firstly in a direct way and secondly in an indirect way. The direct way means for example a tool or an application in which employees, partners or customers are asked to make suggestions for improvements. If there is a great quantity of participants or users asked it is very likely to get some interesting ideas how processes can be streamlined or how they can be improved. There might be especially interesting outcomes if the users or participants daily have to deal with those processes. During the conducted interviews some of the participants came up with some examples regarding the indirect way. This can be understood as a by-product of a gamified process. They mentioned some examples in which a gamified system was implemented in a company. These implementations were very engaging and the users tried to master some challenges or to crack high scores. In doing so, some users or employees had been very creative and found new and much more efficient ways to handle processes or to deal with certain tasks. People come up with good ideas or more involvement, if they for example want to crack high scores. This is something that is intrinsically motivated and which is often related to prove something to oneself and to others. Therefore, gamification can be a tool to develop new and more efficient processes and to promote creativity. (Rackwitz, 2014) (Herger, 2014)

### 4.2.1.3. Knowledge & Data

The third major area of application for gamification in sales deals with data collection and aggregation of knowledge. Nowadays we live in a knowledge society and information, data and knowledge have become increasingly important in business and industry. Almost every interviewed participant independently mentioned how important, a good market and customer knowledge is and how vital a comprehensive information base in the sales business is.
No matter whether planning, consultation, or after-sales processes, a comprehensive database is extremely important in order to make the right decisions and to be able to operate optimally in the market.

**Customer & Market Data:** A solid customer and market knowledge is nowadays essential for a successful sales organization in many cases (Kleinschnittger, 2014a). However, first of all this data basis must be created and maintained. Although there are often good sales software systems or CRM systems, they must also be filled with relevant data and this is still done to a certain extent manually. It is an unpopular activity among employees, since it can be repetitive and tedious. Nevertheless such tasks must be executed as well. In such cases gamification concepts could offer interesting assistance to make such processes more exciting and less monotonically (Herger, 2014). With an improved data basis, better prepared decisions can be made. Furthermore this may lead to new and additional sales opportunities. In this way better customized solutions for individual key accounts or new up- and cross-selling strategies for specific customer groups can be developed. Carignan and Lawler Kennedy (2013, p. 501) suggest that data entry in the context of sales applications could be encouraged through gamification. In this way such tasks receive more attention and obtain priority. For example this might be interesting when managers need such data to generate forecasts. Noll Webb (2013, p. 610) states that: “CRM tools are a good example of where gamification might be used to engage users in activities that the company values but that the end user does not.”

**Knowledge Sharing:** Gamified applications can contribute to a better knowledge sharing within the company, or among employees. Also for this purpose, incentives can be created to encourage employees to share successful strategies and approaches with colleagues (Piechulek, 2014). This may be for example about what requirements were particularly important for a customer, or what arguments were decisive in the sales pitch. However, this requires a collaborative culture and a team-oriented environment. Carignan and Lawler Kennedy (2013, p. 501) found out in their study that sales representatives: “were interested in making connections with coworkers or increased sales knowledge.”
**Innovation Management:** Often, the sales department is an important interface of the company towards the customer. The sales department has in many cases direct contact with the customer. Through this customer contact useful suggestions, requests and ideas might be conveyed to the employees. This information can be very useful and valuable to optimize products, to improve services or even to promote innovation. However is important that these information are utilized within the organization. (Herger, 2014)

### 4.2.2. Factors of success

Trough an in-depth research of literature and the analysis of the expert interviews a number of important success factors for gamification approaches in sales organizations were identified. It was noticeable that the opinions of the participants matched in large parts, regarding these factors. Some experts have raised an additional alternative view, which do not falsify the results, but illuminate other viewpoints and add some other things for consideration. Overall it can be said that the statements in the interviews confirm in large areas the data found in literature.

![Success factors for gamification in sales](image)

**Figure 7: Success factors for gamification in sales**
4.2.2.1. Clear objectives

When considering a gamified software solution it is absolutely essential to have clear objectives. That means that it must be clear what should be achieved with such an approach (Rackwitz, 2014). Gamification is no universal remedy. It is only appropriate for specific problems or challenges. Noll Webb (2013, p. 610) therefore claims that: “Every time you consider adding a gamification element to a business flow, you need to determine what you hope to accomplish.” Therefore it must be clear what the main objective is. Furthermore these objective must be appropriate, realistic and measurable. The measurability of the success of gamification projects is always a critical factor. The participants with sales background reported, that they all made very positive experiences with gamification and game-based learning, nevertheless they stated that it can be quite difficult to break the success of such a project down into key figures. A lot of participants pointed out that measurability and verifiability are important factors that should be given in any case and that one should be aware of. This also means that these key figures must be considered at an early planning stage. On the one hand, they are used for the measurement of success, on the other hand, they can be the basis for improvement and further development of an application. Moreover, they are often an important factor in deciding how to proceed further. Noll Webb (2013, p. 610) confirms that: “It is essential to select areas where outcomes can be measured”

4.2.2.2. Long-term and user-centred approach

Some interview partner suggested a long-term and a user centred approach as an important consideration. It is not the problem that short-term projects would not work. Actually they do. But there might occur some difficulties afterwards. In this regard the problem of declining productivity was mentioned, if a successful gamification implementation will be shut down after a certain period of time. Especially when the respective application was a success, users will for example be used to an enhanced communication, real-time feedback, some kind of recognition or other drivers for motivation. (Rackwitz, 2014)
Then if the system is turned off this can lead to heavy losses of productivity. In addition, such projects always need a certain time for development. Therefore they recommend long-term approaches. Such long-term approaches often imply some special requirements. On the one hand there must be always new and up-to-date content as well as innovative and exciting challenges for the user. This is an ongoing process which requires a lot of input. On the other hand there is the demand for a suitable level of difficulty for the tasks and challenges in the application. Those must be neither too easy, as the user otherwise will not show interest and will not deal with it, on the other hand not too difficult, otherwise only a very small user-circle will ever to make use of the application (Piechulek, 2014). Exactly this point has been taken up and was confirmed by some of interviewed participants. This also leads inevitably back to the theories of Mihály Csíkszentmihályi. The more dynamic and interactive the application, the more important becomes this fact. Van Eck (2006, p. 5) states in this context: “Games that are too easily solved will not be engaging, so good games constantly require input from the learner and provide feedback.”

Another important point which emerged is that the user or employee should always be in focus. Basically, gamification is about making the work environment more pleasant and fulfilling (Herger, 2014). That does not mean to make everything a game. Rather, it is to put users at the centre of considerations and to adapt processes to meet their needs. Rackwitz (2014) for example stated that processes should be aligned users, and not vice versa, the user according to the processes. Such approaches are in fact much more interesting and also have the potential of a positive long-term effect.

4.2.2.3. Game design & game elements

Another point that was raised by various participants during the interviews is that when it comes planning and developing of gamified tool or application, game mechanics and game elements play an absolutely crucial role and should not be neglected. Good game mechanics and sophisticated game principles are at the heart of a successful application. (Kleinschnittger, 2014a) (Güldenberg, 2014) (Piechulek, 2014)
If this issue is not given appropriate priority and importance, it makes little sense in general to deal with gamification or with gamified software. Game mechanics are central element in the concept of gamification. Participants have repeatedly pointed out during the interviews that game structures and game mechanics are essentially important. This is also consistent with the literature research, where authors and experts also claim this in their papers. For example information transparency and real-time feedback are important factors in gamification. Regarding this, Kumar (2013, p. 532) states:

Not receiving any feedback can be extremely demotivating. If you were talking to someone and they remained impassive, you will eventually stop talking, since you are not sure if the other person hears you or understands you. Software that gives you no feedback when you perform an action is significantly less enjoyable to use than one that does.

In addition challenge and meaning are important game mechanics and driver for motivation as well. This also confirmed by Kumar (2013, p. 534) as she writes:

Challenge is a powerful game mechanic to motivate people to action, especially if they believe they are working to achieve something great, something awe-inspiring, and something bigger than themselves.

On the other hand, one interview participant made an interesting point. Although he welcomed this approach, he argued that these game mechanics and game elements are not necessarily critical for success. Raczkowski (2014) stated that a lot of simple Points-Badges-Leaderboard-gamification approaches worked very well if some case studies are believed to be true. These approaches seem to work simply due to the fact that this is something new. But there is nothing sustainable with that. Another participant also confirmed this. So there remains always the question what kind of approach someone pursues. Such a quick and easy approach might not be very sustainable and might come with some undesirable effects.
4.2.4. Culture & attitude

The culture in a company also plays a crucial role for the use of gamification in an enterprise. The employees or potential users should have a positive and open attitude regarding such a project and must be willing to deal with it. When such an idea is rejected out of hand and a negative and dismissive attitude is prevailing it will be difficult to successfully implement such concepts within the enterprise. Furthermore in most cases different departments of a company are involved in such a project. This could be for example IT, human resources, marketing or the legal department. Therefore good collaboration is very essential to achieve a successful solution. (Güldenberg, 2014)

4.2.3. Requirements

In the subsequent section, the requirements should be presented, which were obtained from the analysis of the literature, as well as the material collected from the interviews. At the beginning it can be said that the requirements derived for gamification applications for use in sales organizations are quite similar to those requirements that were found in literature. The various participants have mentioned some points which are already found in some books, journals and articles on the subject of gamification and acknowledged them.

Figure 8: Requirements for gamified applications in sales

- **Usability**: Self-explaining structure, user must know what is expected of them, simplicity, clear goals for interaction, easy handling, intuitive design
- **Compatibility**: Compatibility with other applications, compatibility of data, processing the data, readability

Figure 8: Requirements for gamified applications in sales
4.2.3.1. Usability

An important factor for a good usability is a self-explaining structure and an easy handling. The application should be intuitive to use and the user should always know what to do, what is expected and how to improve (Rackwitz, 2014). So there must be clear objectives for the interaction with the gamified system. These include, inter alia, a high transparency of information and a real-time feedback. Kumar (2013, p. 528f) states that gamification: „attempts to make technology more inviting by encouraging users to engage in desired behaviors by showing the path to mastery, and taking advantage of people’s innate enjoyment of play.” The application should be user-friendly so that it is frequently and willingly used. In addition, however, the aspect of the look and feel should not be neglected. The more pleasant software is perceived, the more likely it will be used. Therefore design aspects play a role as well.

4.2.3.2. Compatibility

The compatibility with other existing enterprise applications was described as an important requirement as well. Companies today are increasingly integrated. This means the individual departments are closely interlinked and increasingly interconnected. This results in the requirement that the software components in the enterprise must seamlessly fit into each other. Depending on the nature and concept of gamification application for a sales organization compatibility with other software can be a very important factor. The areas of application for such software, as already described in the previous sections can be very diverse. In the case that such software collects data, which are further processed in another system, the requirement of compatibility is of course extremely important (Piechulek, 2014). Generally speaking, the deeper a gamified application operates in core processes of a sales organization, the more important is the question of the integration and compatibility. Some participants addressed this issue during the interviews and expressed concerns. Of course, this fact does not apply for any kind of gamified software in sales. In training applications, the question of compatibility probably might not be that important.
4.2.4. Risks and restrictions

As part of design and development of gamified software certain risks and restrictions must be considered. With the help of interviews and the literature research some risks and restrictions have been identified and will now be examined in more detail below.

![Risks and restrictions](image)

**Legal & ethical considerations**

Legal considerations should always be an issue in the development and use of software (Herger, 2014). In particular, the issue of data protection is an important aspect. Depending on the nature of the software this concerns employees, customers, suppliers or other parties related to the company. A key point that comes in the wake of gamified applications is that possibly personal information are collected that have previously not existed and were accordingly not an issue in terms of data protection. Depending on whether and in particular, what data is collected, consideration should be given if such a project is legally compliant. Firstly, it must be ensured that no data will be collected, which is forbidden by data privacy act. And secondly, that no third party has access to this data.

4.2.4.1. Legal & ethical considerations

**Legal considerations:** Legal considerations should always be an issue in the development and use of software (Herger, 2014). In particular, the issue of data protection is an important aspect. Depending on the nature of the software this concerns employees, customers, suppliers or other parties related to the company. A key point that comes in the wake of gamified applications is that possibly personal information are collected that have previously not existed and were accordingly not an issue in terms of data protection. Depending on whether and in particular, what data is collected, consideration should be given if such a project is legally compliant. Firstly, it must be ensured that no data will be collected, which is forbidden by data privacy act. And secondly, that no third party has access to this data.
Processing and storing of the respective data can be critical points. Werbach and Hunter (2012, p. 1449) point out that gamified systems might fail due to legal constraints. Labour law might also be an issue in this regard (Werbach & Hunter, 2012, p. 1449).

**Ethical considerations:** The topic of gamification must always be considered differentiated. If ethical or moral aspects are neglected, this can quickly lead to negative effects (Piechulek, 2014). Much of the criticism of the phenomenon gamification revolves around these points. In the recent past various feedback mechanisms such as points, badges and leaderboards were used to specifically promote competitive situations within gamified applications. Such mechanisms of course can drive employee’s motivation, but can also cause undesirable effects or even opposite effects. Breaking down those concepts to individual employees can generate a strong pressure and cause long term much more harm than good. Gamification approaches that are literally abused to manipulate employees should be rejected in any case. There is always danger that such approaches are misused. For example to much competition or pressure to perform can quickly lead to frustration and disengagement. This may negatively affect the culture within an organization and thus lead to a decline of productivity. Kumar (2013) claims as well, that legal and ethical considerations cannot be ignored within an enterprise context. In addition Werbach and Hunter (2012) also take up this issue.

4.2.4.2. **Resource related limitations**

**Costs & Budget:** Costs and budget are always major factors in the implementation of new tools and applications in the enterprise that need to be considered carefully (Rackwitz, 2014) (Kleinschnittger, 2014a). In relation to a gamified application it must be clarified how much the contents alter or up to which point they must be extended. These differences in software design significantly influence the later development of costs. For a simple training application with rarely changing contents it is very likely that the follow-up costs might be rather low. Whereas a highly interactive application with frequently changing contents may cause measurably higher follow-up costs.
Therefore a cost-benefit analysis might be a useful tool to determine up to which extent such a gamified solution could make sense. The goal should always be a win-win situation, for both, organization and employees.

**Time exposure:** The time exposure that comes with a gamification project should not be underestimated (Güldenberg, 2014). Since gamification is a very interdisciplinary field of activity, many parties are often involved in such a project, which may cause high time exposure in terms conceptual work, development and communication. On the corporate side usually several departments are participating. On external side agencies and software development companies are involved. Especially the planning and design of gamification solutions might take some time. The implementation is then usually less expensive. In many cases, time is a strong limiting factor and a very scarce resource. The departments involved have to provide time out of their day to day business for such projects, which is not always an easy topic. In most cases, the development and implementation of a gamified application requires a strong involvement and commitment of various parties within the company. This could include not only the actual department, but also the information technology department, the legal department or possibly the marketing department.

**Technical practicability:** The technical practicability of such a project must be examined in detail. Especially at the beginning a number of questions arise. Firstly, the existing IT infrastructure in a company must be taken into account. Furthermore, it must be analyzed for which platform an application is to be used. Here, a variety of approaches are possible, such as a traditional desktop application, a web-based solution or even a mobile version for tablets and smart phones. Depending on the type of platform different and specific requirements and restrictions emerge, which play an important role for the design. As already mentioned compatibility with other applications might be an important factor as well. This is also an important point to consider in the context of technical feasibility. In most cases technical practicability should not be a problem, but it is important to consider such issues. (Piechulek, 2014) (Rackwitz, 2014)
4.2.4.3. Undesirable effects

Due to the complexity and far-reaching impact of gamified processes or applications it is possible that undesirable lateral or side effects may occur (Raczkowski, 2014). And there are a lot of undesirable effects one could think of. Thus, it is advisable to consider such undesired effects as early as possible to be able to counteract them. A simple example is that outcomes may occur which were not intended. A concrete example in this regard comes from Noll Webb (2013, p. 612):

For example, if your business goal is to increase the number of invoices a user completes per hour, you may increase speed (intended) at the expense of accuracy (unintended). In some cases, such as invoicing, it is impossible to know immediately whether the information is accurate and may be several days before errors are uncovered.

Another example would be that game mechanics or competitions are coming into the fore and employees start to disregard other tasks of their daily business or that other activities lose its priority in the perception of employees (Rackwitz, 2014). Furthermore, undesirable psychological effects can occur related to individual employees or in groups. If such applications are not designed the right way, they may get boring, annoying or lose their effects within a short amount of time (Piechulek, 2014). In addition some participants with gamification background pointed out that there are in most cases people or user that try to explore the limits and may bend the boundaries. Systems or regulations might be circumvented and rules are bent. This may lead to the compliance issues or legal problems.

In order to counteract such undesirable effects it is therefore advisable to test such application in advance in a small group of users. Thus, undesirable effects can be detected in an early stage and especially before productive use. Nevertheless it cannot be excluded that the gamification leads to effects that were not foreseen but may have negative impact. (Raczkowski, 2014)
4.2.4.4. Internal resistance

When it comes to planning a gamification project the issue of internal resistance should be considered (Herger, 2014) (Güldenberg, 2014). Gamification is always concerned up to a certain point with change management. That means when implementing a gamification concept or a gamification application there are often process changes. These process changes may alter or move also the power and influence of individual employees (Rackwitz, 2014). Therefore, it cannot be ruled out that certain groups feel threatened and may work against the changes in the process structure. Furthermore, it is important to remember that a lot of people may have a sceptical or suspicious mindset regarding innovations or changes and therefore may adopt a refusing attitude against that. Therefore it might be necessary to do some kind of persuading.

4.3. Scenarios for application

One of the main objectives of this thesis was to identify possible application scenarios for gamified applications in sales. Above and beyond those, in the previous sections success factors, requirements and limitations were described. In the following some conceivable scenarios are described, and it will be presented what a concrete implementation could look like for the use in sales. Those scenarios mainly consist of a classification, a short description and a wireframe, which means a conceptual draft of a software-frontend. The scenarios are primarily used to illustrate some capabilities of gamification in a sales context and to give some impressions. However, the claim is not to present completed and self-contained models. Merely a rough frame is defined and exemplary applications are presented. It must be noticed that, the scenarios outline only simple scaffolds and are not provided with further game mechanisms or game concepts.
<table>
<thead>
<tr>
<th>Process optimization tool</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td><strong>Benefit / Potential</strong></td>
</tr>
<tr>
<td><strong>Considerations</strong></td>
</tr>
</tbody>
</table>

**Use Case**

A concrete application possibility would be a tool that helps to optimize processes. Employees can use it to easily and quickly indicate unfavourable or inefficient processes. By means of a simple application, employees can take pictures to better illustrate and shortly describe the cumbersome or complicated process. It is important that such inputs can be made quickly and easily. If employees notice unfavourable or cumbersome processes, they can point them out simple and straightforward. In addition they can make suggestions for improvement. These data are then collected at a central location and can be analyzed and evaluated. On this basis, it can be decided which process should be changed. On a statistics page in the application could afterwards be presented which improvements were achieved in this way and how much cost has been saved. It would be also possible to donate a part of the cost savings to charity. This would be an additional and meaningful incentive for participation in such a project.

**Prototypical Implementation (Wireframe)**
Product Training Environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Training &amp; Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit / Potential</td>
<td>Exciting and interactive transfer of product knowledge, Better trained sales representatives with extensive product knowledge</td>
</tr>
<tr>
<td>Considerations</td>
<td>Must be constantly kept up to date, changes to product specifications need to be implemented immediately</td>
</tr>
</tbody>
</table>

Use Case

Another possible scenario would be a product training environment for sales people. To this end, one could build a mission environment that can be played through by the employees. The different missions cover different parts of the portfolio. A game-based and interactive structure is intended to make the content more interesting for the user. Furthermore the training must not take place at a certain time, but can be done when it suits best for the employee. In this way sales representatives can become familiar with the latest products or services and their features and USPs. Through a mobile application training can be carried out on business trips or in waiting times as well.
Process Training Environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Training &amp; Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit / Potential</td>
<td>New staff is prepared more quickly and effectively on their tasks, Savings potential for training costs</td>
</tr>
<tr>
<td>Considerations</td>
<td>If processes change the tool must be adapted</td>
</tr>
</tbody>
</table>

**Use Case**

Also processes can be mapped very well in a training environment. In such an environment process knowledge could be provided and taught with the help of game mechanics. For example, employees could learn through a puzzle theme, which process steps need to be done one after the other. The player has the task of bringing the individual puzzle pieces in the correct order, so that at the end of the correct process chain is created. Every piece in the puzzle represents a certain process step. Afterwards, the individual steps could be queried again in a quiz form for deepening and consolidation of knowledge. New employees can be incorporated faster and might be better prepared for their areas of responsibility with the help of such environments.

**Prototypical Implementation (Wireframe)**
Innovation tool

<table>
<thead>
<tr>
<th>Category</th>
<th>Data &amp; Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit / Potential</td>
<td>Collecting data regarding innovations, which might be a competitive advantage</td>
</tr>
<tr>
<td>Considerations</td>
<td>Collected data must be analyzed and evaluated</td>
</tr>
</tbody>
</table>

Use Case

A platform to collect ideas and innovations, in which users can make entries quickly and easily, could be a useful tool. This can be ideas or suggestions from client meetings, or own suggestions for improvements. It is important that the tool is easy and straightforward to use. This could include both a photo-mechanism, as well as space for description so that ideas can be immediately recorded. By evaluating the underlying database, requirements, desires and trends can be uncovered and recognized in a more efficient way. The design and user interface play a crucial role to ensure that the application is comfortable to use.

Prototypical Implementation (Wireframe)
**Competition / Motivation tool**

<table>
<thead>
<tr>
<th>Category</th>
<th>Productivity Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit / Potential</td>
<td>Higher motivated and more engaged employees, welcome change from everyday life</td>
</tr>
<tr>
<td>Considerations</td>
<td>Competition can always be risky and lead to undesirable effects</td>
</tr>
</tbody>
</table>

**Use Case**

Another conceivable scenario would be a competition between sales teams responsible for different regions. This competition could for example be mapped to a car race. Each sales team would be represented by a race car. Generating revenues would provide the drive for the race car. This competition would aim to increase motivation and to encourage collaboration within the various sales teams. This challenge could for example run a quarter and the sales team that first reaches a pre-defined revenue value wins and their race car crosses the finish line first.

**Prototypical Implementation (Wireframe)**

![Wireframe Image]
## Structure change tool

<table>
<thead>
<tr>
<th><strong>Category</strong></th>
<th>Productivity Enhancement, Data &amp; Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefit / Potential</strong></td>
<td>greater customer orientation, long-term approach for better customer retention, improved corporate culture</td>
</tr>
<tr>
<td><strong>Considerations</strong></td>
<td>major change which requires time</td>
</tr>
</tbody>
</table>

### Use Case

Through a holistic approach with the help of gamification it might be possible to change the whole structure of a sales organization to the effect that revenues and margins are not the primary metrics any longer, but customer satisfaction is at the top. This approach would be characterized by the fact that it is not the aim to sell the product with the highest margin, but the product that fits best to the needs of the customer and also generates the greatest benefits for them. The aim would therefore be primarily long-term and well-established customer relationships. Overall, a collaborative environment could be created in which employees feel more comfortable and are less exposed to competitive pressure. At the same time, customer satisfaction rises and customer lifecycle is extended. With similar approaches in which sales commission system were abolished, significant successes have been achieved in the past (Solman, 2010).

### Prototypical Implementation (Wireframe)

![Prototypical Implementation Wireframe](image-url)
Lead generation tool

<table>
<thead>
<tr>
<th>Category</th>
<th>Productivity Enhancement, Data &amp; Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit / Potential</td>
<td>Higher number of new leads, higher motivation, knowledge transfer, new sales opportunities</td>
</tr>
<tr>
<td>Considerations</td>
<td>The collected data must then be evaluated and used</td>
</tr>
</tbody>
</table>

**Use Case**

Also for an enhanced lead generation a gamified solution would be possible. Here an application could be designed that encourages sales teams to an increased gathering of leads and to enter those together with contact details and sales opportunities into the system. Particularly good usability is important again. Possibly a ranking could be implemented that is based on the number of generated leads and the revenue which could be ascribed to them. Those sales representatives who are far above in this particular ranking could then pass on their formula for success to their colleagues in order to achieve better results as a team.

**Prototypical Implementation (Wireframe)**
5. Conclusion and critical reflection

The results which were derived from the interviews almost completely confirmed what was found in literature. Some alternative points of view had been revealed, but those are different perspectives on the subject in the first place and not a falsification of certain results. The collected data complemented the existing literature very well and thus significantly contributed to describe some principles for the application of gamification in sales.

5.1. Summary of the main results

First of all conceivable areas of application for gamification in sales were identified. In analyzing and examining those areas of application it was found that the major category Training & Development might be medium-dated the most promising one. There are already a lot of applications in use in this field and some experiences have been gathered with such approaches. Nevertheless the other two areas of application Performance Enhancement and Knowledge & Data which emerged in the course of the study are important as well and might take on greater significance in the years to come.

Furthermore some success factors were found which are important for the use of gamification. First and foremost clear goals must be given, because gamification is not a proper solution for any kind of problem or situation. In addition these goals should be measurable. Both interview partners and literature suggested that that a good game design and the use of game elements are important factors. Moreover a long-term and user-centred approach should be chosen. A gamification project can be more successful if a company or an organisation with an open culture and positive attitude. Mainly two major requirements were identified regarding the application of gamification in sales. A good usability in order to enable employees in sales to be more engaged and more productive was most frequently claimed. But also compatibility to other application and to the existing IT-infrastructure was also a topic that emerged.
In addition some risks and limitations were examined. No matter what field of application, legal and ethical considerations should always play a role when dealing with gamification. Resource related limitations such as costs, time exposure or technical practicability must receive attention when planning such a project. Furthermore, gamification always can have some undesirable effects, which one must be aware of. Also the possibility of internal resistance should be considered.

In summary it can be said that similar to other fields of application, gamification for the use in sales, holds many opportunities and potentials. It is a very exciting and promising approach and if such an approach is considered to be implemented, is crucial to delve into this subject.

5.2. Critical reflection and prospects

Retrospectively, it must be said, that it was very difficult to find participants with appropriate knowledge on this special subject. A larger sample size would have been desirable. On the other hand every conducted interview was a great success, in terms of the data that the participants had contributed.

The topic of gamification is just at the beginning. It remains to be seen what trends will emerge within this interdisciplinary field. There is still a lot of work to do and further research must be conducted regarding many different issues. For example it must be examined in more detail how sustainable and long-term approaches can be designed. Or in general how sustainable gamification approaches are. Another issue which should be investigated is what really motivates sales representatives. This was also claimed by Carignan and Lawler Kennedy (2013). Furthermore it would be interesting to determine is such approaches work for small and medium-sized companies as well.
Gamification is a very interdisciplinary subject in which many concepts, ideas, approaches and achievements of various scientific disciplines are interrelated. Insights and theories from behavioural psychology, organizational psychology, motivational psychology, media studies, game design, game theory, software development and business processes can be considered as important aspects, influences and foundations (Rackwitz, 2014) (Raczkowski, 2014) (Piechulek, 2014) (Herger, 2014). This fact makes the matter so complex, sometimes difficult to grasp, but simultaneously very interesting. To unite and balance all of these disciplines is therefore, a very complex undertaking, simply because an overwhelming number of factors that plays a role. Thus, it is sometimes not easy to reduce a problem on a few factors, as implicitly other criteria or adjusting screws might have influence on a certain topic.

The actual and original core ideas of gamification involve many ideals and noble motives. It is a fact that the working environment has massively changed over last decades and that it is in a constant state of flux. Many approaches, management theories, process chains, structures and hierarchies are inherited from the era of industrialization and originate from these models and their requirements. A lot of assumptions in terms of leadership and motivation relate to a very different social and societal context, as the prevailing today and possibly to mechanical than on intellectual work, which is of course a huge difference (Rackwitz, 2014). Thus new systems for the working world of tomorrow must be created in which other incentives and circumstances are in the foreground. The idea to use the medium game increasingly in a corporate context in order to achieve positive effects is absorbing in every case. But it is important that positive effects emerge for parties, enterprise and employees. Only if a win-win situation is created and all involved parties and stakeholders benefit, and long-term success might be possible.

In any case the subject of gamification can be very useful tool for the years to come. The ideas and concepts behind this phenomenon are combined with a lot of ideals and suggestions for improvement. In addition, the field is much broader than one might expect. Gamification makes use of a variety of knowledge and scientific achievements, and new areas of application are opened up in a creative and fascinating way.
Certainly it will be exciting to watch what approaches and trends will emerge in the coming years. However, the question of implementation remains. In many cases, it is still resorted to implementations that actually have little to do with the actual core ideas of gamification. The fact that these approaches have certain effects should not be denied, but there are far more interesting implementations conceivable. These simple mechanisms with points, badges and leaderboards, they work, if perhaps only temporarily. This is confirmed by some case studies as well as various experts (Rackwitz, 2014) (Raczkowski, 2014). These approaches are still practiced on a large scale, but do actually not correspond to the basic concept of gamification, namely to design processes which are more comfortable for the user and to create a better environment for employees. Which is often describes as user-centred design (Kumar, 2013) (Herger, 2014). Such user-centred approaches seem be rather rare in practice until now. Although more satisfied and engaged employees might have a positive impact on the overall success of a company as they are higher motivated, more committed and can lead to satisfied customers. Satisfied customers are more likely to buy repeatedly and more frequent. Reason enough, to grant a certain maturity phase to this relatively new and novel phenomenon, so that experiences can be gained and concrete implementations of gamification projects can be improved.
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