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„Deriving a Competitive Advantage by leveraging users
into Business model development“

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Alexander Hoffmann

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Univ.-Prof. Mag. Dr. Josef Windsperger

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III Abbreviations:

B2B	Business to Business
CA	Competitive Advantage
CT	Club Tool
GCA	Global Competitive Advantage
OL	Opinion Leaders
PF	Production Factor
PLC	Product Life Cycle
TIC	Tools for User Innovation and Customer Design
WoM	Word of Mouth

1. Introduction

The growing global awareness or “globalness” nowadays underlines an economical limitation of our age, the feasibility of market boundaries. In the past, companies were in search of new markets and the main goal of many growing companies was to enter these new markets. Geographical location and industrial production played an important role, since customers usually expected quality, low prices, good service and quantity. The producer has to face Porters 5 determinants, i.e. entry barriers, rivalry, supplier power, buyer power and substitution threats. Enterprises have been in need of classic factors of production such as labor, capital and land. However, new technological advances like the Internet supported acceleration of information transfer, and therefore nowadays knowledge represents the 4th production factor. Faster and cheaper international water, land and air transport decreased the importance of location and enlarged the geographical business area of enterprises. Easier availability of resources increased the speed of reorganization and growth, at the same time reducing the importance of other factors of production like land, labor and capital. These developments were fundamental catalysts for internationalization and globalization. National borders do not represent barriers anymore like they did in the first half of the 20th century and, therefore, market competition reached a new level of intensity

Besides monopole positions, economic markets are always on the move and develop new characteristics. Under higher competition, the party with more efficient utilization and distribution of production factors achieves higher advantages. In Western world knowledge emerged as an especially powerful and promising production factor (PF), since other factors there are more expensive than elsewhere in the world. Any advantages a company possesses over its competitors are called competitive advantages (CA), and such advantages are essential for company's further development and success. Furthermore, customer expectations have been influenced by new technologies. The product life cycle (PLC) has been shortened by a half in the past decades and companies are often forced to evolve new business models faster than expected to stay in business. Nevertheless, new business models cannot be based on assumptions, but have to embrace the demand of the market. Classic evaluations and research appear not to be most efficient for certain businesses and therefore a change in methods has to be found. According to Adam Smith:

“The greatest improvements in the productive powers of labor, and the greater part of the skill, dexterity, and judgment, with which it is anywhere directed, or applied, seem to have been the effects of the division of labor.” (Adam Smith, 1768, The Wealth of Nations, p. 7)

Therefore, tasks such as development and improvement of a business model should be divided as well, especially if the involved group profits by improving the product. Users represent a useful tool for product evaluation, as it has been proved in the past, but in recent years companies started to use customers’ knowledge for business model innovations (Chesbrough, 2011). Since the market demand consists of the user will, it is logical to implement the customer point of view and his experience. An improvement of quality and reduction in risk by capturing the demand of customers would result in a higher success rate and represent a remarkable CA.

The Master thesis “Exploring the effects of Leveraging Users in the Process of Business Model Innovation” written by Törnblom and Hellman (2013) is one of the first which analyzed the potential of user integration in the business model development, but observed only a Swedish podcast and kept this theory national.

However, according to the internationalization effect, this master thesis considers the world to be in a global transition where single nations, or even cultural areas are not isolated, but represent a merging market. It is of interest to prove if this CA contains similar potential in various cultures. Based on Porters five forces theory there is a global competitive advantage (GCA), which represents a powerful and desirable goal. Nevertheless, this CA might achieve different levels of success measured on a global scale. Different cultures have varying demands, understanding, desires and habits. In their “Uppsala”-model, Johanons and Vahlnes exploited what it means for companies to be active in different cultural areas. There is a reason why companies often try to enter neither geographical nor national areas of business, but in the first place cultural areas. Common culture reduces the amount of obstacles to be faced at once. This work will focus on the cultural area of Europe, since the previous study was held in Sweden. The goal of this Master thesis is to compare results of user integrated business innovation from different markets in one cultural area and in the end to present the transnational applicability of this CA. The results are meant to support future studies so that the applicability of this CA will be eased for all business environments.

The second study will be held in Austria, which means that Sweden and Austria will be compared for common adoption of this CA. The area of research will be focused on sport clubs. An Austrian company called “Eversport” is producing an online “Club-Tool” called

“Vereins-Tool” for Austrian clubs to simplify work as organization and marketing. Since the public relations area appears to be a business with high competition, companies are in need of customer information for a successful product. Especially in modern markets with high specification options, as it is the case with the “Club-Tool”, product information is crucial for further success of a company. Therefore, potential clients will be involved in the process of product and even company model innovation. Future customers have the option to test and observe a prototype model of the future “CT” and implement their ideas. Based on an evaluation process the best ideas will have the chance to enhance the business model. Not only the product is the target of innovations, but also the company model itself. Customers expect better quality, faster results and customized products (Chesbrough, 2011) p. 1, but this is only realizable if the customer is integrated into development phase. Company-developed innovations have limits. Many companies have been successful in developing a rising star-product, but failed to produce continuing successful products because they observed the market from the wrong perspective (Chesbrough, 2011, p. 12).

A higher interaction of customers and producers in terms of demand allocation seems to be a reasonable next step in the nowadays intensively entangled world. The main question is whether this strategy would have similar CA in different cultural areas or whether cultures are as globalized and adjusted to each other as expected.

Therefor the research question will be focusing on the customer integration into business model development and observe, how much of a competitive advantage depends on an earlier integration of potential customers into the basic business development. According to Törnblom and Hellman (2013) a customer integration into business improvement leads to bigger competitive advantages and based on this findings, this paper will observe the research question

“What potential does a user – integration into a business model development exhibit?”

2. Business Model Shift Initiated by the Transition of Economies

Business models are constructs that reflect value propositions and operations of every company. Each company has a business model, since this world is driven by desires and can be served by the order of supply and demand. It is not a question of philosophy, but one of definition. Defining every action to be selfish, this point of view gets more general. Even altruism is considered to fulfill the human desire “to do good” in this world and does reflect a selfish need. Therefore, every company is considered to have a value proposition and operational model (Lindgerdt, 2009). However, possessing a business model does not mean that it remains constant over time. Changing environment forces companies to adjust, and these adjustments often lead to shifting business models. This evolutionary process can be triggered by many different influences, e.g. changing customers needs and other conditions influencing the market. Basically, these influences are Porter’s five forces and additional evolvments of environment and technology. In this research the latter two factors appear to be of especially high interest. The increasing speed of globalization driven by the age of information forces business models to change, and the classical influence from supplier side diminishes. The demand dictation by suppliers switched to demand definition by customers, since new frontiers of competition appreciated the power of customer demand. The industrial era’s logic is no longer preserved (Treece, 2010).

2.1. Transition of World Economy

In the past decades many scientists constantly actualized their theories about internationalization, diffusion of influence range and competitive advantages. The main reason for this is the fluent transition of markets, but between 1977, when Johanson & Vahlne published their first paper concerning the internationalization effect, and 2009, when the same authors revised their original version, the speed of change accelerated. Porter’s CA theory provided a foundation in the concept of international business, but it was still adopted to the changing market and adjusted for a global perspective. This perspective was mainly required because of three areas that experienced changes. Changes in economics, interpersonal relations and politics are the most malleable parts of the actual market transformation (Johanson, 2009).

- Economic changes include modern habits of buyers, their interaction and new market strategies, which are also influenced by technology.
- Interpersonal relations focuses on human capital, its appreciation and care, since it presents one of the most important resources of the Western Hemisphere.
- Political changes lead to deregulation of government structures around the world, from the former Soviet Union and the Chinese market to the deregulated electricity market of the Western Hemisphere.

(Stewart, 1998)

The main focus of this paper will be on the first two points, since influence of technology and human capital as a resource are the most valuable variables of business model innovation by customers. Especially new technological innovations as the Internet push new business models to the surface and enable new ways to extract information, which is necessary for risk reduction (Breuer, 2012). The constant curiosity leads to a continuous development of the new media and its usability.

As a result, this implies economic changes, higher interaction and a wave of deregulation that highlights the importance of competitiveness on a global scale. Higher competition in a market of the same size leads to the expectation of globalization.

However, the definition of globalization is rather varied. According to Shell;

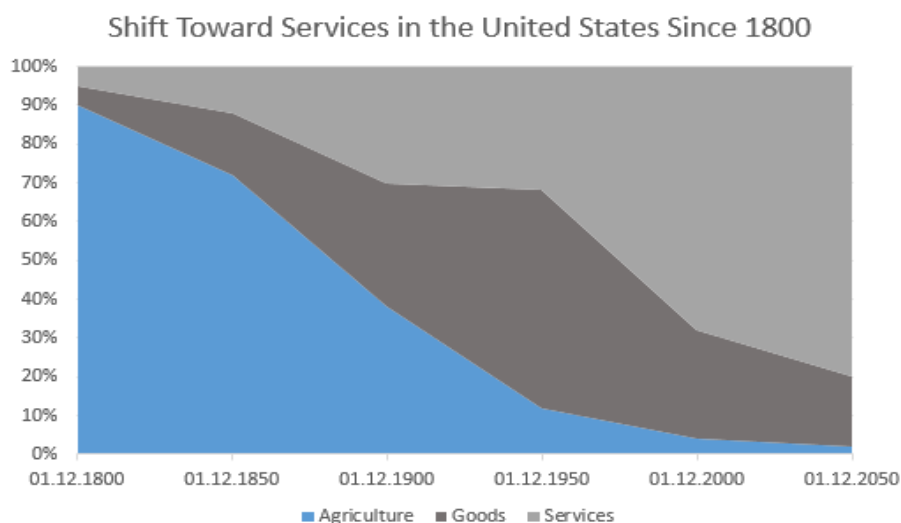
“Globalization is the process of transformation of local or regional phenomenon into a global one. It can be described as a process by which the people of the world are unified into a single society and function together. This process is a combination of economic, technological, sociocultural and political forces” (Olasunkanmi, 2011, p. 1).

In contrast to internationalization, where companies represent a multinational interacting market entity, the globalization is a much more complex stage of evolutionary process. Economy, technological, sociocultural and political influences ended up in one melting pot representing a wide scale for advantages and complications at the same time. As described in the “Upsalla” model, enterprises tend to expand in cultural areas for some amount of time, since the usual market habits are already studied and the product is adjusted (Johanson, 2009). These cultural areas are usually divided into 5 blocks, as there are: *“Nordic countries (the Netherlands, Sweden, Norway and Denmark); South-East Asia; Latin America; the Anglo-Saxon countries (the United States, Canada, the United Kingdom and Australia); and the*

Germanic countries (Germany and Austria)” (Drogendijk, 2007). Nevertheless, there are companies who left this process behind them and now represent the so-called “global players”. Leaving the barriers of cultures behind and evolving to be global players, the increasing amount of them creates new markets and situations. Competition is no longer bound to geographical areas, but is now a ubiquitous phenomenon.

Another development, which supports the market drift is the change of proportion between agriculture, goods and services. Around 1800, about 90% of the marked capacity was supplied by agriculture, 5% by goods and another 5% by services. Throughout the industrial era the market switched to goods as the preferred and largest representative of market capacity, but this lasted only until 1950. Today, over 70% of the market is served by services, around 27% by goods and only around 3% by agriculture. The tendency of this development is predicted to continue until services will dominate almost the entire market as figure 1 represents (Chesbrough, 2011). The graph reflects the situation in the United States, but it is representative for the Western Hemisphere and other powerful economic markets. This development is correlated to the economical level of markets, since with growing prosperity the need for physical goods decreases and services are playing a higher role, as Abraham Maslow already displayed in his pyramid. Therefore, markets such as the US, North-Western Europe and Japan are leading representatives of the service-shift effect.

Figure 1: Shift Towards Services in the US



(Chesbrough, 2011)

Observing this situation, it seems logical that new technologies accelerate market interaction and the globalization effect, since the most common product of interest on the market appears to be service. According to Gbaguidi the concept of service is:

“...basically associated with the provision of access points, authentication procedures, and techniques for meeting the client’s requirements” (Gbaguidi, 1996, p. 2).

These requirements are commonly supported in many ways by new technologies and this support has been used to create new markets. Certainly not all services can be distributed digitally via the Internet, but many are, e.g. communication, financial, informational and other services. New options for products and their distribution created a new trend away from physical adulation and towards personal informational fulfillment. This is a trend that should be observed closer.

However, the new developments of technology and the trend from goods to service markets proved old methods to be insufficient and CA to be more essential than ever before. Nowadays, single CA, e.g. operational efficiency, is considered not to be enough in today’s fast changing and highly innovative market (Reichwald, 2009). Companies will always have to work harder and find new ways to compete with even more players. This basic principle will sustain as long as the evolutionary process continues and the world population grows.

2.2. Business Models and Goals

Business models have been a scientific part of the economy for a long time. However, only since 1954, when Peter Drucker summarized the purpose of the business model, it truly became a mentionable and feasible term in the economy. It was defined for the first time what a business model reflects, such as the core structure of a company, the targeted customers, what value is offered and how the enterprise is willing to make profit (Drucker, 2011).

Nevertheless, the term was not used broadly in the following decades. The awareness of the definition would not change habits and manners. Businesses continued to appear and diminish using successful or less successful concepts. According to figure 1, goods have still been a major product in the market, or at least they had a significant, but diminishing, part of the whole market. With appearance of new trends and technologies, new markets and new business concepts seemed not to be self-regulated by the market as old businesses have been.

In the early 90s the so-called dotcom boom appeared, when companies such as Netscape produced first online billionaires without creating physical goods. This effect created misdirection of capital and overvaluation of business that lasted until the collapse of 2001. Most investors or shareholders did not realize that a concept needed to be present for a successful enterprise, or so called business model, which can explain the most important questions as already defined by Drucker in the 60s. This lack of understanding and misleading expectations allowed the dotcom bubble to appear and to foster later on the real-estate bubble, which led to the worldwide economic crises of 2008 (Greenspan, 2007).

Nevertheless, already after the first unexpected developments in the online industry, scholars realized that a common understanding of the business concept was needed and should be researched explicitly (Zott, 2011). Therefore, common understanding for business models has been defined as:

“...business models emphasize a system-level, holistic approach to explaining how firms ‘do business’” and further “business models seek to explain how value is created, not just how it is captured” (Zott, 2011, p. 1).

The concept of business models got more popular and more widely accepted than before. It has been adopted for reasons of security and safeguard. A more scientific approach appeared reasonable and scholars such as Chesbrough, McGrath, Zott, Masanell and Teece devoted their interest to this phenomenon. Especially the business model innovation seemed to be of interest, since the competition is permanently growing and companies have to improve and adapt to the changing environment. Nevertheless, it is essential to mention that a business model is not consisting only of a value-generating product, but the whole concept of a company itself. Therefore, Chesbrough alleged that:

“...a mediocre technology pursued within a great business model may be more valuable than a great technology exploited via a mediocre business model” (Chesbrough, 2010, p. 1).

2.3. Invention, Innovation and Improvement

There are different ways to achieve innovation. Facing a problem and the realization of demand for a more efficient approach provides an incentive. A common definition for this term is as follows:

“The process of translating an idea or invention into a good or service that creates value or for which customers will pay. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need” (Businessdictionary.com, 17.01.2015).

However, to start the process, the so-called promoters are needed (Brockhoff, 2008). Only a promoter is capable to analyze the situation and take appropriate steps toward invention and only market-proved invention can become innovation. The differentiation between innovation and invention can be found in the following definition:

„New scientific or technical idea, and the means of its embodiment or accomplishment. To be patentable, an invention must be novel, have utility, and be non-obvious. To be called an invention, an idea only needs to be proven as workable. But to be called an innovation, it must also be replicable at an economical cost, and must satisfy a specific need. That's why only a few inventions lead to innovations because not all of them are economically feasible” (Businessdictionary.com, 17.01.2015).

The above definition basically describes the fundamental process of innovation. Of course, there are different types of promoters, such as the power promoter, the specialist promoter and the project promoter that have different influences and functions, but these differences are less important at this point. It is enough to say that they play an essential role in starting an innovation process. After starting the process of development and research, a chain of activities will follow. Typical stages are planning, testing, evaluation, production, re-testing and re-evaluation, which are not necessarily executed in this order. The classical point of view considers the process of invention to be separated from the innovation process (Schumpeter, 1911, p. 128). Nevertheless, modern research views these processes as more unified, since invention is basically nothing else but an accumulation of knowledge. The process of invention provides data for the very same invention and at some point might lead to innovation (Witt, 1987, p. 18). Especially nowadays, when the interaction reaches a new level of intensity and developers, promoters and customers have high influence on the process of innovation by expressing their needs and expectations via new media, these classically defined borders between invention and innovation are blurred.

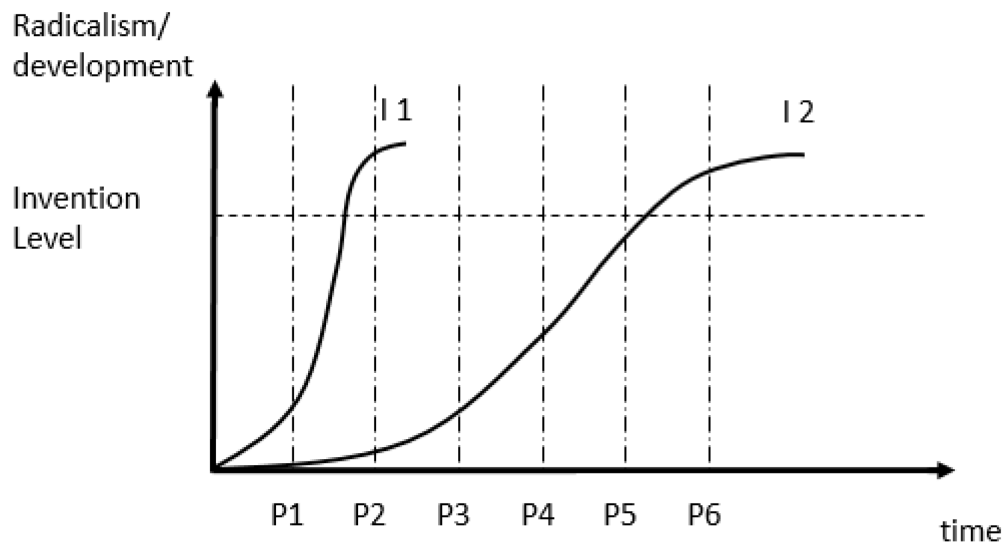
On the other hand, there are clear differences at the core of these processes, as invention defines a new product, which has not found its place in the market yet, but only exists because of the hypothetical demand. Contrary to that, innovation is a product that is a valuable part of the company's portfolio, since customers already accept it. An invention can still turn out as

sunk costs, whereas innovations have proven their value already. There are strict differences, but at the same time common interactions.

Nevertheless, in the present situation customers are playing a different role in the innovation process, since the described invention and innovation process have changed over time. The customer is a free individual who has a better understanding of his demands and habits. In other words, he is a source of valuable knowledge to the entrepreneur, or promoter, who depends on this kind of information. Knowing this, companies use new media for a higher customer-supplier interaction, but customers are not directly depending on companies alone, since they are able to use tools and adjust solutions themselves (Hippel, 2006, p.3). This topic will be discussed more in the following “User Driven Innovations” chapter.

The last point to discuss is the difference between innovation and improvement. In the previous part of this chapter the definition of innovation and invention was given and the relation between these terms has been clarified, whereas improvement still represents often a common misunderstanding and confusion. Improvement is clearly a situation that has to be positioned higher in value than a previous situation, but without the incremental step of invention. Nevertheless there are also so called “slow innovations”, which constantly improve a situation over a long period and therefore reach a new level of product (Brockhoff, 2008). This form of product innovation will not be considered of interest in this work, since this kind of innovation is very difficult to observe and to evaluate. Only long-term studies would be able to compare changes in time and research the level of improvement or innovation. However, improvement is a slower, less radical change and therefore bears a lower level of risk, as well as a lower level of revenue. There is no need for new product evaluation. A basic improvement might represent the first of many steps towards an innovation, but could at the same time represent the final level of development. The uncertainty and missing representative potential is the major difference. Depending on the kind of innovation, e.g. radical or permanent, there will be a different amount of time needed before it reaches a certain level of development from where it can be considered an invention. This situation is reflected in figure 2.

Figure 2: Contraction of PLC



(Own Creation, following Brockhoff, 2008)

Putting the discussed subject of this chapter in order, the first step to an innovation is naturally the improvement, followed by the invention and in the end the innovation. Since variables such as time needed, level of development and market success are not constant, there will be differences in perception. However, various outcomes and perceptions lead also to a challenging situation in measuring improvement, invention and innovation.

There are different ways to evaluate the innovativeness of products. On the one hand, companies can present new products and promote them as innovations and first of their kind. This is called a subjective innovation. A more objective way to prove the incentive step of innovation would be a patent. In that case an official institution for patents e.g. the INTERNATIONAL PATENT INSTITUTE will evaluate the individuality and the necessary level of invention. Nevertheless, it is a time-intensive and costly way. Another option is getting more popular, which involves using customer knowledge and their perception to evaluate the level of novelty at the same time as evaluating the product itself. Since not every product has a patent, there is a need for other ways of evaluation. Decisions not to apply for patents are justified in different ways, two of the most important are knowledge preservation and cost management (Brockhoff, 2008). However, this transition from the classical industrial product-evolution chain, where research is followed by development and kept in secrecy, to

a more open minded approach of product development. This implicates the user himself to be a new important variable and restructures the process, which is called the “user innovation”.

2.4. User Innovation

This already very common term stands for the currently happening shift from creating products solely by a company, to a more interactive process between parties. Keeping an open mind for new impressions, borrowing ideas, taking advices, starting a market analysis almost parallel to the idea generation, are all trends that developed only in the past decades. After the first researchers such as Rosenberg and von Hippel discovered very promising results in the area of user innovation, companies started to gradually take more interest. However, the idea of user integration in the product development had to stay basically theoretical until the new tools were developed which made it possible to use this potential.

Only after the evolvement of interactive systems, e.g. the Internet, collection and filtering of valuable user information became possible (Piller, 2006). Originally, it was the manufacturer’s task to capture all consumer ideas, to analyze and evaluate them and in the end to create innovations, if so desired. Nevertheless, in addition to the process of customer integration into the innovation process, the evaluation process also changed over time. Producers started to create areas where ideas became improvements, improvements became inventions and in the end eventually innovations (Piller, 2006). Independent of the effort, not all ideas are valuable inputs and, therefore, user innovations have to be managed as any other process. With support of mass media management, high amounts of data are analyzed to summarize main demands and favorable suggestions handed in by users, but often new products are not properly evaluated.

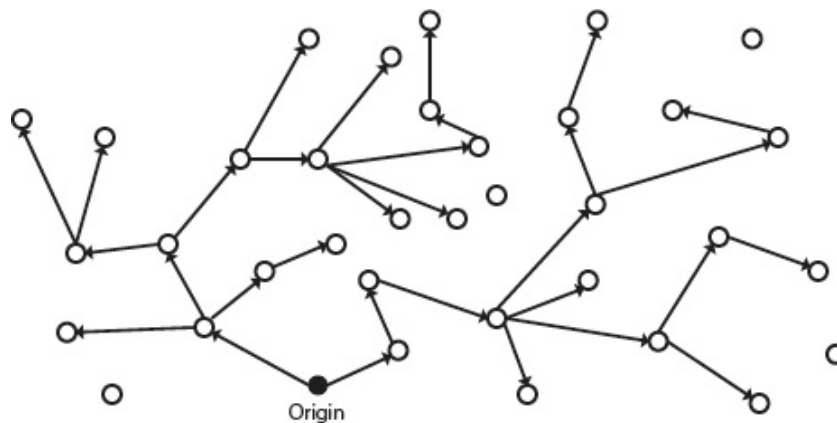
Therefore, it is important to distinct in two kinds of users: the lead users, who are also called opinion leaders, and the following users.

To evaluate the importance of these parties, a closer look will be taken at the distribution of innovation, involved parties and their roles.

2.4.1. Diffusion of Innovations

As has been previously stated, product distribution may take different forms and speed. These factors classify innovation's performance and therefore its ability to prosper (Rosegger, 1996, p. 11). The distribution and diffusion are social phenomenon and based on “(1) acceptance, (2) over time, (3) of some specific item-an idea or practice, (4) by individuals, groups or other adopting units, linked (5) to specific channels of communication, (6) to a social structure, and (7) to a given system of values, or culture” (Katz, Levin, & Hamilton, 1963, p. 240). Starting at a point of origin the diffusion process can reach the whole targeted or available population as it is presented in figure 3.

Figure 3: Spread by Contact



(Rosegger, 1996, p. 201)

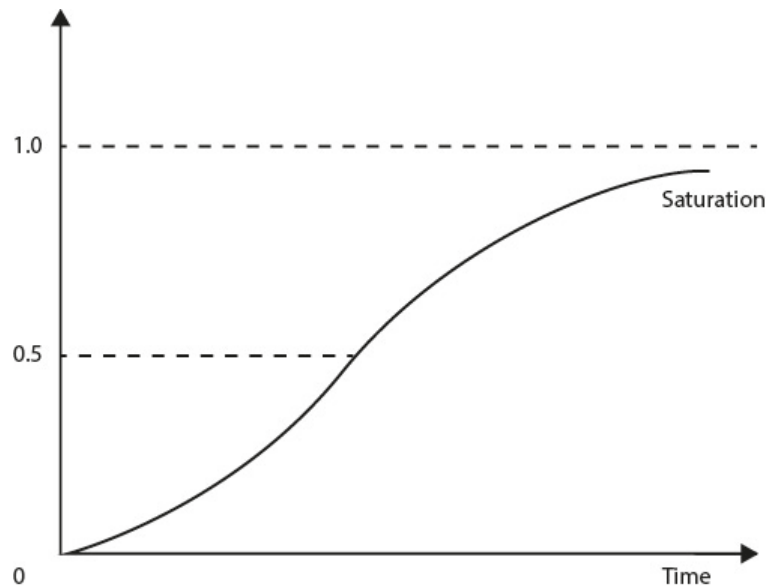
As mentioned, the diffusion varies in speed and success rate. The more adopters are contacted the higher is the expected speed and success of the innovation. However, when the possible pool of users decreases, the innovation will find a level of saturation. In other words, the chances of spreading the innovation grow with an increasing amount of already contacted adopters, but in the end there is a natural barrier of potential.

A mathematical approach could be defined by

$$dx/dt = ax(1-x),$$

where “t” represents time, “x” the percentage of all units which have been contacted in the process of distribution and “a” the probability of spread. It has been agreed by scientists that under the expectation of a logistic function the diffusion curve would be presented in a form of an S-shape as it is visualized in figure 4.

Figure 4: S-shaped Logistic Diffusion Path



(Rosegger, 1996, p. 201)

The previously discussed saturation effect is clearly presented in figure 4. However, this perspective assumes all innovation to be radical and satisfying previous undiscovered needs. Reality is usually different, since innovation is not always as radical as described and therefore competes with other popular solutions (Rosegger, 1996, pp. 202-204).

Nevertheless, by considering users as an innovative power in this paper, there is a need for further differentiation between customer adoption and industrial adoption, since industrial adoption usually bears a higher risk and importance for the entity than customer adoption would. Industrial adoption considers variables such as economic performance, diffusion rate and R&D demand, whereas consumers basically evaluate price and their income (Bonus, 1973, pp. 673-674).

Although entities of the empirical study in this paper are sport-clubs, they will be considered consumers, since the amount, the size and the individual subjective perspective are closer to a consumer, than to an industrial adopter.

2.4.2. Distribution Channels

Distribution of information is a requirement for adoption and, as previously discussed, there are different ways of distribution. However, individual communication and mass communication can be differentiated shown in table 1.

Table 1: Classification of Mass Communication and Individual Communication

Individual Communication	Mass Communication
limited amount of addressees: friends, acquaintances, peer group	wider circle of addressees: distant strangers
homogeneity of addressees	low homogeneity of addressees
sincere	sometimes exaggerated up to insincere
impartial of the advertising objective, no commercial interests	dedicated to the advertising objective, profit-oriented
face-to-face communication, low distance between sender & addressee	employs a mass medium, greater distance between sender & addressee
chance for feedback, bilateral communication	hardly feedback, mostly unilateral communication
reference of advantages & disadvantages	sole focus on advantages
immediate social sanctions like praise and approval	hardly or no social sanctions
frequently addressable	infrequency of contact

Following (Hahlheimer, 1997, p. 18) based on (Kroeber-Riehl, 1996, p. 517)

Mass media such as TV, Internet and print media enables spreading information at a high speed and reaching a wider amount of potential adopters (Rogers E., 1995, pp. 17-18). Among all important mass media distributors, only the Internet is an interactive medium and therefore has a special standing, since information can be shared in two directions. For that reason, it has a special position in the context of users innovation discussed in this work.

According to Bass (1996), who performed an early test study, it is possible to divide adopters in (1) Innovators; (2) early adopters; (3) early majority; (4) late majority and (5) laggards.

Excluding innovators, the other 4 groups are influenced by social pressure and subjective opinions or, better to say, by the innovators' decisions to adopt.

Individual communication has a powerful and more persuading influence on individuals than mass communication. Interpersonal communication can be divided by informational influence and normative influence, which is often more subtle, but not less influential (Deutsch & Gerrard, 1955). This leads to a situation where households, i.e. users in this case, adopt innovations after evaluating the price and risk even when the outcome of this evaluation appears to be less powerful, but other trusted members of the social environment such as well-informed friends, salesmen and insiders may turn out to have a huge effect on the users decision (Rosegger, 1996, pp. 218-229).

Nevertheless, these insiders, well-informed friends and salesmen are users and customers already. Otherwise, they would not be able to give a detailed opinion and express a normative influence on later followers. This knowledge makes them a valuable asset, which will be later looked at in more detail.

2.4.3. Opinion Leaders and Others

This valuable asset in the form of lead users or opinion leaders (OP) is only one out of four different kinds of influential consumers defined by van Eck et al. (2011, p. 188) and Rogers (1995, pp. 27-28). These four kinds are: innovators / early adopters, market mavens, opinion leaders and change agents. Two of the most important qualities of individuals to emphasize are the heterophily and homophily. They can be defined as:

“Heterophily is the degree to which pairs of individuals who interact are different with respect to certain attributes” (Rogers & Bhowmik, 1970, p. 526).

“Homophily refers to the degree to which pairs of individuals who interact are similar with respect to certain attributes, such as beliefs, values, education, social status” (Rogers & Bhowmik, 1970, p. 526).

These qualities are important because they differ in the authenticity of influence.

The *innovators / early adopters* are the first to adopt a product and therefore possess a considerable amount of specific knowledge (Engel, Kegerreis & Blackwell, 1969, pp. 18-19), but on the other hand their position leads to

"a somewhat dubious status of low credibility by the average members of the system. This individual's role in diffusion (especially in persuading others about the innovation) is therefore likely to be limited" (Rogers E., 1995, p. 26).

This is to be expected, since the innovator or inventor appears to others as an individual who is interested in distributing products that are not, or at least not fully, adopted by the market. In any case, the first contact a customer makes is likely to have more positive when the recommending person or entity appears to be objective. An innovator in fact cannot be objective towards his own product and possesses therefore a lower credibility (Rogers E., 1995, p. 26).

The next phenomenon is the market mavens. These are individuals, who possess a huge amount of knowledge about the market per se. They are specialists in their area and are basically very well informed. However, their knowledge is not profound in each area and so they generally lack knowledge about specific products (Feick & Price, pp. 85-94).

Change agents are individuals who manipulate the market and users. The opinion and direction of manipulation depends on the demands of agencies they are working for. Often, these change agents are equipped with a university degree, which identifies them as some kind of an expert in a certain field. Nevertheless, at the same time it is a characteristic that differentiates them from their clients. This resulting heterophily leads to the same effect as what innovators / early adopters suffer from (Rogers E., 1995, pp. 27-28).

The last and the most interesting group are the opinion leaders. The main reason for their importance is their character. Unlike the previously discussed groups, they are homophilous, since they have backgrounds similar to users they are influencing. This allows them to emanate self-assured appearance. It is a similar aura as the previous players possess, but without sales intention. However, these opinion leaders excel also in terms of knowledge about a specific product as well as in terms of social integration. Usually these kinds of experts have a huge social network, which they permanently penetrate with new insider information about their products.

According to Rogers (1995, p. 27) opinion leaders are:

"...more exposed to all forms of external communication, and thus [...being] more cosmopolite, /2) [...having] somewhat higher social status, and (3) [...being] more innovative

(although the exact degree of innovativeness depends, in part, on the system's norms)" (Rogers, 1995, p. 27).

This innovativeness and individuality is of high value to customers and, therefore, companies. The opportunities this information bears for development of new products, supported by opinion leaders, still remain to be measured. Nevertheless, opinion leaders are known for being able to set trends and start or increase demand for products. Therefore, it is fair to say that opinion leaders are able to

"serve as an apt model for the innovative behavior of their followers" (Rogers E., 1995, p. 27).

Another role the opinion leader inherits is that of a mediating translator of mass communication. It is often difficult for consumers to evaluate messages transmitted through mass media, since they are affected by so much information every hour in the modern world (Katz & Lazarsfeld, 1955, pp. 32, 33). Opinion leaders' function of translating and transforming sometimes abstract information for the user is immensely valuable to companies. Eveland points out that

"technology is information, and exists only to the degree that people can put it into practice and use it to achieve values (Eveland, 1986, p. 303)".

In the end, opinion leaders have two important roles they fulfil. The first one is the role of an informed insider who translates complicated information to other potential adopters, by reflecting his experience, his knowledge or opinion. This aspect reaches a new dimension in the nowadays globalized, internationally connected, digital world. People spend, or want to spend, less and less time on studying specific aspects of different markets, but want instead to have the main information presented to them. A perfect example is the evaluation and test web sites, where different reviews are provided along the price comparison and links to buy items (www.pricegrabber.com, 11.02.2015). The second role of an opinion leader is the one of distributor of word of mouth (WoM) on a homophilous level. Since they have better insight into the product they are talking about, their opinion is of a higher value to users and will be spread with a completely different level of credibility (Nielsen, 2007).

Due to this normative and informative influence on consumers, multiple works of research have been conducted on this topic. The expected influence has been tested and the results have been partially promising. A popular study was performed by van Eck et al (2011) where users have been tested in a form of an online game.

The study conducted in the Netherlands involved an online studio for kids that enabled them to build their own TV-show and radio-program. After creating their own channel, they had to promote it and evaluate other channels. With an option of winning a prize at the end, this competition gave an interesting opportunity for observing the normative and informational influence of the participants.

The main findings of the study were as follows:

“The more innovative behavior of the opinion leader results in a higher adoption percentage.”

“Opinion leaders are less sensitive to normative influence than are followers.”

“Opinion leaders are better at judging product quality, which results in a higher speed of information diffusion.”

Opinion leaders are better at judging product quality, which results in a higher speed of product diffusion” (van Eck, Jager & Leeflang, 2011, p. 197).

These findings, at a minimum, confirmed that opinion leaders had high importance in the case of online game distribution. Networks with opinion leaders appear to distribute products much faster than networks without them and further opinion leaders are able to increase the effectiveness of mass media by translating the important information and sharing it with potential customers (van Eck, Jager & Leeflang, 2011, pp. 199-200).

Similar findings have been presented by von Hippel (2006), who used a term “lead users” instead of “opinion leaders”. Frank and von Hippel (2003b) discovered that innovations were more effective when the user suggesting the new ideas have been showing a higher degree of lead user characteristics (von Hippel, 2006, p. 23).

Eversport sport club tool will also be distributed via online media. The target customers are well aware of the issues involved in club organization and have some expertise in that field. It is possible to draw similarities between these studies and to expect related influences. Therefore, the surveyed users who are directly responsible for their sport clubs as clubs’ chairmen will be handled as potential opinion leaders.

3. Competitive Advantage Created by User

As discussed, nowadays companies are often exposed to an international environment and to, at least, national competition, since new ways of distribution appeared. Competitive advantages are part of the crucial equipment that a modern company needs for facing a new level of rivalry in the market. However, it is important to distinguish between different competitive advantages by defining them, and evaluate the most reasonable options for improvement, since not all strategies are equally applicable. Competitive advantages can certainly vary and need to be constrained. Major areas for advantages are human resources, regulation systems and contracts. The latter two are important for market reactions and execution of strategy, but the focus of this study will lie on the human resource factor, where, besides the employee, the customer plays an important role. In addition to using regular staff, using customers is an option for increasing the knowledge base and labor force that needs very little investment. As Porter (1991) describes competitive advantages in his theories, there are regional differences in competitive advantages. The national competitive advantage and global competitive advantage are two kinds with different factors influencing them. Nevertheless, these distinctions are less powerful now during the Internet age than they were approximately 25 years ago when Porter developed his strategies. Nowadays, it is difficult to separate national and international markets and the same applies for competitive advantages of companies. Since the human factor and therefore the user per se will be observed as the most important competitive advantage, one reasonable argument is the open innovation. These are projects where people from all over the world can work on the same program or individually change and adjust it. This movement started in the 60s and 70s with the free software movement that created the basic idea for a free usable product for further development and innovation. Therefore, in the late 90s the open source software movement evolved. The difference to the free software movement was described as:

“It differs from that movement primarily on philosophical grounds, preferring to emphasize the practical benefits of its licensing practices over issues regarding the moral importance of granting users the freedoms offered by both free and open source software” (Hippel, 2006, p. 99).

Projects like these show that innovations initiated by user and therefore competitive advantages are no longer constrained within geographical borders. Porter’s view might be applicable in some niches, but should not be used as a general perspective. Innovative users

can be found everywhere and these users are able to start new trends. Compared to companies' management, who often rely on assumptions (Pillar & Walcher, 2006) users often prove themselves to be talented enough to provide equal or even better solutions than professionals would. This was confirmed by different studies (e.g. Plötz & Schreier, 2012/ Nishikawa et al., 2013/ Ogawa & Pillar, 2006).

3.1. Definition and Distinction

The competitive advantage is under permanent shift. Looking from the theoretical, technological and social point of view, it is changing over the factor time. However, there is a fundamental concept of competitive advantage that is considered to be true in this work and therefore further observed. The competition over resources such as capital, labor, land and knowledge is a challenging situation, and the party with a higher share of these resources is presumed to possess a competitive advantage. As described previously, the main focus and the best chance of staying competitive lies within the knowledge factor. This concerns the human capital itself, as will be explained in this chapter. Nevertheless, for this we will need further differentiation of terms.

3.2. Competitive Advantages

After mentioning that competitive advantages are changing over time, but do have a constant core, two definitions with a time gap of approximately 18 years will allow a closer insight into this topic. Porter's definition in 1985 was as follows:

"Competitive Advantage is about how a firm actually puts the generic strategies into practice" (M.E. Porter, 1985, p. 9).

This generic strategy can be divided into differentiation, focus and cost leadership strategy. Almost 20 years later Peteraf (2003) generalized the definition of competitive advantage by summarizing it as:

"...if it is able to create more economic value than the marginal (breakeven) competitor" (Peteraf & Barney, 2003, p. 314).

This generalization might be interpreted as a common change in practice. The new media and life style creates new dynamics in economics. With consumer products adopting a constantly

abridging life cycle, unexpected consumer demand appears and previous long-term habits and relationships disappear. This effect applies to jobs, business relationships and strategies. Actually, it appears that the life cycle is constantly accelerating and previous longtime processes were compressed. In other words: “Everything that puts a company in a better positions than its competitor might be a potential competitive advantage”.

Nevertheless, it is possible, as previously mentioned, to follow from the roots of this development to the appearance of new technology, which of course has to be accompanied by a certain level of social acceptance. These changes allowed the society a faster transfer of information, which appears to be the most powerful desire and problem at the same time these days. Correctly collected data, allowing to source information which again results in knowledge is the most required resource in developed countries. However, this knowledge is increasingly difficult to collect and to protect in an increasingly digital and globalized world. This contradiction leads to demand for new sources of competitive advantages, which might be found in the “User innovation”.

3.2.1. User Knowledge

Since knowledge was defined as a combination of information, it leaves the user as a variable, which, depending on the point of view, might require a more complicated scrutiny. Obviously users are a certain amount of individuals who have been already in contact with a certain type of product. However, if this product did not exist in the market, the next most similar product could be chosen for a measurement. The second differentiation that has to be made are the previously mentioned lead users and following users. There are significant differences in terms of activity, innovativeness and knowledge. These finding have been proven in different studies as e.g. by van Eck et. al. (2011) in his online game simulation, where children were creating their own radio and TV channels. These channels needed to be promoted by themselves in social media networks and the channel with the best performance would win a block of real on-air time (van Eck et al., 2011). Apparently, from 10 up to 40 percent of users modify products for themselves as is displayed in figure 5. This figure gives a brief overview of various studies, which confirmed a high level of individual contribution to the development of products in the past (von Hippel, 2006, pp. 19). Compared to other findings, these results are quite high, so a certain response bias has to be taken in consideration.

Table 2: Individual Contribution to Pricat Development

	Number and type of users sampled	Percentage developing product for own use	Source
Industrial products			
1. Printed circuit CAD software	136 user firm attendees at PC-CAD conference	24,3%	Urban and von Hippel 1988
2. Pipe hanger hardware	Employees in 74 pipe hanger installation firms	36%	Herstatt and von Hippel 1992
3. Library information systems	Employees in 102 Australian libraries using computerized OPAC library information systems	26%	Morrison et al. 2000
4. Surgical equipment	261 surgeons working in university clinics in Germany	22%	Lüthje 2003
5. Apache OS server software security features	131 technically sophisticated Apache user (webmasters)	19,1%	Franke and von Hippel 2003
Consumer products			
6. Outdoor products	153 recipients of mail order catalogs for outdoor activity products for consumers	9,8%	Lüthje 2004
7. "Extreme" sporting equipment	197 members of 4 specialized sporting clubs in 4 "extreme" sports	37,8%	Franke and Shah 2003
8. Mountain biking equipment	291 mountain bikers in a geographic region	19,2%	Lüthje et al. 2002

(von Hippel, 2006, p. 20)

Nevertheless, major innovations in areas like sport, scientific instruments, heavy machines, in-house products and widely licensed chemical production processes were performed by users or user companies (Shah, 2000, Pavitt, 1984, von Hippel, 1988, Freeman, 1968, Enos, 1962, Rosenberg, 1976, Adam Smith, 1776).

“Market needs are not static-they evolve, and often they are driven by important underlying trends. If people are distributed with respect to such trends as diffusion theory indicates, then people at the leading edges of important trends will be experiencing needs today (or this year) that the bulk or the market will experience tomorrow (or next year). And, if users develop and

modify products to satisfy their own needs, then the innovations that lead users develop should later be attractive to many” (von Hippel, 2006, p. 22).

According to this, the user knowledge is basically generated by the customers demand for further adjustment or better products. In other words a customization for certain areas, which results often enough in mainstream motions, might be of value. Since the change of markets leads to different demands, users are able to evolve first-hand solutions for these. This interactive process of development occurs in every single improvement. The remaining question is: „What are the incentives for the user to reveal their knowledge?” These incentives generally differ. On the one hand, it is fame. People use the advantage of creating something new and collect recognition by improving the previous product. Then there is the opportunity to receive this product later when it is mass-produced, but including the demanded adjustments for themselves. Here the user is driven by his demand and by his self-interest. Many customers use new media to write emails, which takes a lot less effort than the previous paper letters, and demand or suggest product changes. A downside of this input is the difficulty to evaluate inputs from all individuals. The third reason for sharing their knowledge is a chance of receiving a reward, which might result in a physical way. Often, there is a combination of all these motivations that convinces a user to action. Nevertheless, users also have a risk of loss, since other customers or companies might see a further enhancement to their suggestions and, therefore, the final product might bear a different purpose (Reymond, 1999). This permanent traction between benefits and losses describes the user driven situation pretty well. Out of uncertainty, customers usually remain using their personal innovations privately and avoid extensive effort even if possessing crucial knowledge. Unfortunately, only in the second half of the 20th century scientists started to increase their interest and focus on user- based innovations. The fact that crucial user-driven innovations were omnipresent in the industry, such as the heavy metal industry, has been ignored or underrated. And as previously mentioned, not only the heavy metal industry revealed these kinds of influences. This valuable resource was confirmed, but never observed, analyzed and evaluated. Obviously, before the age of the Internet, these kinds of evaluations would have taken an immense amount of resources, and this might be one of the reasons for a dismissive attitude towards this topic. A useful and resourceful approximation towards the area of user integration in innovation processes required a scientific approach that considered cost-benefit calculations.

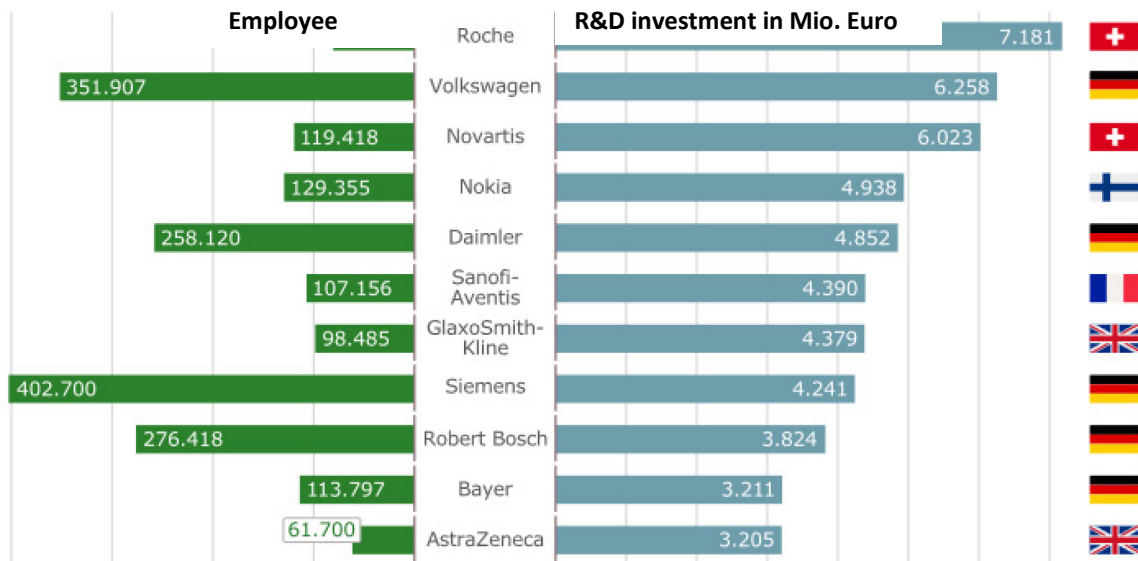
Frank and Shah (2003) conducted a research in the sport community “Canyoning”, which combines the three sports of climbing, rappelling and swimming. Evaluating the research,

they found out that users who spend more time doing these disciplines score usually higher on the lead user scale and, therefore, produce more innovative ideas. These results might have been expected. However, 23% of all developed innovations by these users have been already in the process to be produced in future by manufacturers (von Hippel, 2006). This only reflects that the potential of customers is already used by producers and provides opportunities not only in the fields of extreme sports such as the canyoning.

3.2.2 Entrepreneurial Perspective

Companies are facing high expenditure by planning for future products, as can be seen in figure 6. Comparing huge industrial companies like Siemens SE, Volkswagen and Daimler, the R&D investments in 2013 are approximately 5% of the turnover. Actually, Siemens spent 5,7%, Daimler spent 3,2% and Volkswagen spent approximately 5,78% of their turnover. Nevertheless, it is still 43,0% of Daimler's profit, 96,4% for Siemens and for Volkswagen it is even 124,7%. These are enormous amounts, which reflect the importance of development, and the only purpose for that is the need to stay competitive. In the end, these expenditures are directly invested in competitive advantages or their further evolvement. Using free or cheaper and more precise information would result in lower costs and therefore higher revenue. which is the top priority for any capitalistic company. The opportunity to collect innovations and new input from customers is a major chance for companies for optimization. However, this perspective is new and still has to be accepted by the top management for a better strategic implementation.

Figure 5: Industrial R&D Investment (2013)



(www.bdb.de, p.1., 28.01.2015, 19:56)

Using user innovation can save a whole chain of actions, since innovation not always happens in a single step. Usually a series of trial and error phases found a way toward the area of solution (Baron, 1988). Nevertheless, this process is conducted to a company commissioned R&D assignment done by a private developer out of interest to the solution and, as mentioned in the previous chapter, probably even out of interest to the process itself. Another difference is the real-life purpose and reality of the product, whereas the companies' R&D process not necessarily results in a product. These differences make the customer-developed products so interesting and valuable (von Hippel, 2006). This potential has still to be discovered to its fullest and will therefore experience many different transformations in the future decades, as for now the social media networks are already crowded by companies trying to involve users in various ways to collect different information.

Another point to be taken in consideration when evaluating the opportunity of user innovation is the so-called sticky information. This is a part of the "knowledge management". Knowledge is not always considered to be simple to transfer, since it is divided in personalized and codified knowledge. Codified knowledge can be contained in databases and is easy to acquire. However, the personalized knowledge is bound to an individual and is more difficult to share. There is even a part called tacit knowledge, which expresses a person's ability to be capable of performing an action, but unable to explain it (Polanyi, 1958, pp. 49-53). This leads to careful acquisition of knowledge, often after an explicit analysis of

the. It has been researched that informational asymmetries between customers and companies have an impact on the delivery of novel functions as is shown in figure 7. Apparently, new functions developed by customers often tend to be more novel, whereas the manufacturer developments are of higher convenience. However, this affirms the assumed theory of different perspectives used by customers and companies towards a product (Rigges and von Hippel, 1994, table 3).

Table 3: Type Based Innovations

User tend to develop innovations that deliver novel functions.

Type of improvement provided by innovation	Innovation development by		
	User	Manufacturer	n
New functional capability	82%	18%	17
Sensitivity, resolution, or accuracy improvement	48%	52%	23
Convenience or reliability improvement	13%	87%	24
Total sample size			64

(Riggs and von Hippel, 1994)

Firms have an incessant pool of information by using customers as developers. Nevertheless, the right method to source from this pool has to be first evaluated, adjusted and then tested. Depending on the obstacles, refining of this process will be necessary. As Ogawa found out in his research, need-intense developments are probably well done by users, whereas solution-intense developments most probably will be supervised by companies, which have the right know-how and resources (Ogawa, 1998). However, this study was conducted for industrial goods and does not affect the resourcefulness of customers for information.

In the end, all this leads to the result that user-centered innovations are taking a more fundamental role in our economy and society. A formidable example to this can be found in the industry of kitesurfing equipment producers. Over the past decade, community developed a powerful innovative society at Zeroprestige.com (von Hippel, 2006). This society achieved a level of quality and quantity that appeared to exceed the one of the producers in the industry. Combining this information and resources supplied by customers, industrial producers have been able to build kites at a lower price than other competitors. The gap appearing between previous investment intensities and nowadays production investments,

after implementing the user developed kite designs, are a result of heterogeneity in resources and information supplied by these innovative customer communities (von Hippel, 2006, p.126). In other words, these kind of competitive advantages are superior to alternative cost-cutting in terms of materials and employees and should be sought in other areas in the same way as in the kite industry. This should be viable regarding certain restrictions, or fostering conditions as need-intensity and solution-intensity.

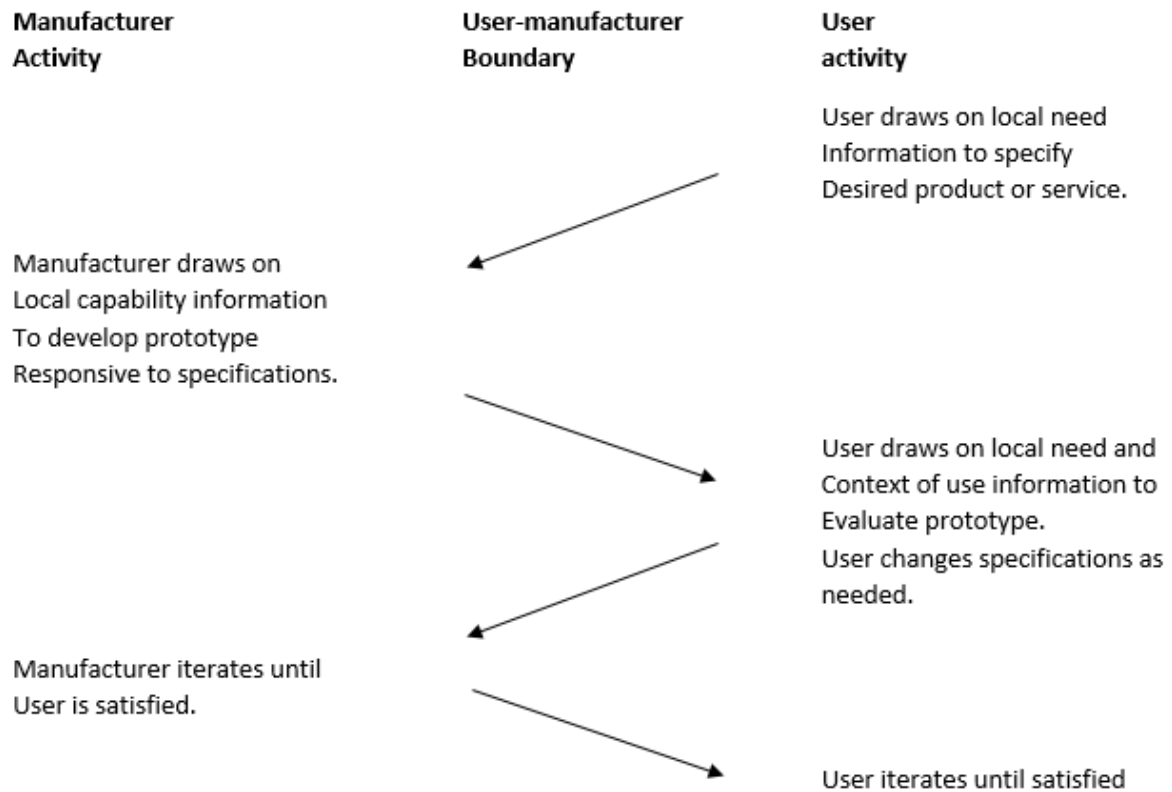
3.3. User Integration

There are various options for integrating customers into the innovation process. However, in the end, everything depends on the subjective customer perspective. An individual himself needs to benefit from the innovation process. Now, the aspect of “benefit” can be interpreted in different ways and depends on person’s preferences. Slaughter, for example, compared the innovational effort an individual itself would have to apply to improve a product important to him. Effort might include variables such as time, costs of materials and knowledge, which in some cases have first to be collected. This all would have to be compared to the increased usefulness of the constructed or improved product. On the other hand, the consumer might have supported the company’s innovation process, which would result in an overall improvement for others as well as for the individual, and it might additionally generate a reward (von Hippel, 2006). This perspective appears to be unilateral. Individuals do not necessarily create and perform only for physical rewards. There are tasks, which are done only for the reason of process rewards, which is a very strong and important phenomenon that needs to be taken in consideration when talking about innovational processes.

“...,there is evidence that individuals sometimes greatly prize benefits derived from their participation in the process of innovation. The process, they say, can produce learning and enjoyment that is of high value to them.” (von Hippel, 2006, p. 60)

Further studies confirm this argument. Therefore, it is crucial to trigger this desire by companies for further cost reducing, profit increasing and speed acceleration of development. According to Thomke and von Hippel it was possible to reduce the time of development by 2/3 in the field of semiconductor development. Furthermore, in the year 2000 more than 15 billion dollars were generated by selling user integrated circuits. These number show the potential of customer integration in economical innovation, but there is certain obstacle to master before this unmeasurable source of knowledge can be channeled (von Hippel, 2006).

Figure 6: User - Manufacturer Interaction



(von Hippel, 2006, p. 148)

Figure 8 is representing the usual manufacturer-user interaction in an innovative process. After several steps of refining and information exchange the user hopefully achieves a condition of satisfaction and successfully passes the crucial information for his needs over to the supplying company (von Hippel, 2006).

However, this process is not necessarily that easy. Information has to be passed in the right order, form and sometimes in the right context. The wrong interpretation of information can lead to fatal issues. This was the case with the dot-com bubble at the beginning of the 90s or 17 years later the following real-estate bubble. Apparently they have been built on each other and only shifted from one to the other after crashing separately. Nevertheless, fast growing return rates have been taken for granted. Even after the first crises expectations have been only shifted to another marked. Customers have been demanding, as investors for loans with the purpose of buying real estate. The very same loans have been given by investors who bought bonds, which have been rated not as risky as they should have been. In the end the

investors have been receiving wrongly interpreted information, which lead to wrong decisions (A. Greenspan, 2007).

This only reflects the importance of a proper evaluation method of user information. In general, this is the obligation of companies, since they are the ones who want to collect the knowledge and demand in the best possible way. Only with advances in modern technology, interactive and more advanced kind of user integration has been made possible. These are called “Tools for User Innovation and Customer Design” (TIC). The tasks of collecting information is usually organized and supported by special software. The purpose of this software is to simplify the customers’ input process, so that their thoughts can be captured as authentically as possible. There are various examples of companies integrating this software in their day-to-day business.

Westwood, for example, provided their users with video programs that allowed them to create their own video game sequences (Jeppesen, 2005).

Mathworks.com is a web site where specific mathematical tasks are given and users can earn rewards. Specific tasks are given that require the use of certain programs and which have to be presented in the end as well (Pillar & Walcher, 2006).

Innocentive is a similar community, where specific tasks are given. However, it is a company looking for solutions to the problems their clients ordered to solve (Pillar & Walcher, 2006).

Also, as previously mentioned, there are the Treadless.com T-shirts, which are designed by their customers. These customers are rewarded with financial benefits, e.g. a certain percentage for each T-shirt sold with their design (Pillar & Walcher, 2006).

P&G uses YET2.COM as a direct scientific channel through which the firm can look out for innovative solutions. These solutions can be used for P&G’s purposes in different subdivisions (Pillar & Walcher, 2006).

Now, many of these solutions have been design-based and there is a reason for this. Design based changes are easier to define and to pass on than more subtle ones. These other innovations and improvements often involve much more sticky information than the design-based ones. Therefore, transfer of this information is more demanding and usually takes a longer amount of time, as figure 8 represents. Since the information is not forwarded as accurately as possible because of the stickiness, the dissatisfaction rate is quite high. The

higher dissatisfaction rate goes hand in hand with a rather complex exchange of demands and solutions, until a level of satisfaction is reached that leaves the customer pleased.

The purpose of TIC is in the end to divide tasks into subtasks, so that information can be better transferred. Even when tasks involve a certain level of stickiness, it is easier to handle them separately. This allows to create an internal development trial and error process between user and producer, which is less price intense than one-sided innovation with sticky information demand (von Hippel, 1998, 2001; Thomke & von Hippel, 2002; von Hippel & Katz, 2002).

Since tools are not necessarily a new development, there are slight differences between classical tools and modern high quality TIC, which contain 5 attributes.

Enable user to do trial and error cycles himself

Offer a solution space where design can be created

User-friendly in terms of required training

Contain libraries of modules which are usually incorporated in products

Ensure production with standard and predefined machinery without further adjustments

(von Hippel, 2006)

By refining information received from the user, a much higher value can be created. These conditions also prevent misinterpretation and misdirection by customers input.

Nevertheless, there are other drawbacks such as lack of space for freedom. Customers are bound to preset options and might not be able to show their full potential. Some of the previous points mentioned by von Hippel work against other opportunities such as innovativeness and need–definition, or even against discovering unknown needs.

This chapter's purpose was to describe and visualize the importance and potential of customers' innovativeness. Also, while considering users to be a major innovative power, the focus was still tending toward product development. This is obviously an austerity in terms of user potential. However, providing different perspectives while at the same time considering each group's interest, i.e. the one of companies, customers and markets, allows a more fundamental point of view towards options for innovation. Furthermore, this prepares a basis for a combined customer-company performance in the area of business model development.

4. Business Model Innovation

Business innovation is a very modern discipline where users are considered as a potential resource. Chesbrough was one of the first to reflect the previously presented user innovativeness onto business models themselves (Chesbrough, 2010). Since the competitive market situation affects almost all branches of economy, this approach received higher attention especially in the past years.

The first study to evaluate the influence of customers on business models was conducted by Tornblom and Hellman (2013). Their primary task was to measure the value of leveraging users in the business model improvement process. Choosing an already existing business model and improving it by implementing customer ideas allows calculating user potential in certain areas. However, they have not been able to follow the whole process of a business model, since they have chosen to research the improvement of a business model. There are two situations that have to be taken into consideration. A new business model is created and a previous has to be adjusted. Both projects are essential for a company and deserve the highest attention. Regardless of that, the creation of a new business model comes with a higher amount of freedom, whereas the existing model will have to keep some key aspects of the previous business form. On the other hand, both tasks have similar stages, such as evaluation of the environment, estimation of options and implementation of the designed plan (Sako, 2012). By implementing user opinion, this important process can be improved and extended. According to Zott and Amit (2010), a business model represents value to all parties interacting with the company in any way.

“A business model is geared toward total value creation for all parties.... The greater the total, the greater the focal firms bargaining power, and the greater the amount of value it can appropriate” (Zott & Amit, 2010, p. 219).

4.1. Demand for Business Model Innovation.

As previously mentioned, there might be different reasons for business model innovation. The first reason might be as simple as business model development required by a new company entering a market. The other one is usually internal and external environmental changes (Sosna et al., 2010).

From slight to extreme business models changes, there are various effects. Small adjustments might lead to a better performance, as was obviously observed in the example of the computer mouse developed by the Xerox Company. However, the product was only later picked up by the Apple Company and just adopted in a different manner (Chesbrough, 2010). Other companies took an extreme approach, as Dell did in the past and turned out to be extremely successful with their innovative strategy of exclusively online distribution (www.dell.com). It is difficult to predict the outcome of a business model change, or better to say, it was difficult to predict the outcome at all. Since this is the prime target of the whole process of leveraging customer innovation, the primary goal is to minimize the uncertainty of success.

Without properly developed business models, firms are facing failure (Teece, 2010). It is difficult to anticipate company's value and follow a well-organized plan while not being concerned with the basic structure of the firm. Efficient and effective performance cannot be achieved if no preparations are done. Compared to the past, nowadays technical opportunities allow not only to anticipate own performance, but also to incorporate other parties in this process. This reduces the market risk and increases both the success rate and the product-company awareness of customers, since they support the business model development from the beginning. Nevertheless, there is evidence of complications. Existing business models can influence management decisions and preset filter for future innovation, regardless of its origin. This can appear in the context of a new business model as well as in the context of an improved existing business model. One reason for this are the cognitive barriers, which are preventing managers from taking a more objective point of view, as Chesbrough pointed out (2003). Therefore, business innovations are in need of a different perspective e.g. the one of customers, clients and other parties. Using a more dynamic approach would lead, according to McGrath (2010), to a more solid market position with an immeasurable source for competitive advantages. Unfortunately there is no optimal approach. Since this area of study is still young, different previous findings are combined and applied (Chesbrough, 2003, McGrath, 2010).

However, firms have already realized the potential that users have even for business process improvement and started to implement it on regular bases, e.g. at the threadless.com business concept (Hienerth, 2011). The only stronghold protected by entrepreneurs is the unwillingness to give up their leadership in terms of business development. Allowing customers, or potential customers, to develop an innovative business model for a company is a difficult task. Entrepreneurs would have to give up creativity, freedom and power, which would require a very trustworthy relationship.

4.2. Business Model Design

Speaking of business models, it is necessary to agree on the concept which allows further comparison. Basically, it is an activity that defines the firm's personality. The goal of business model design, according to Teece, is:

"...what customers want, how they want it, and how the enterprise can organize to best meet those needs, get paid for doing so, and make a profit." (Teece, 2010, p. 172)

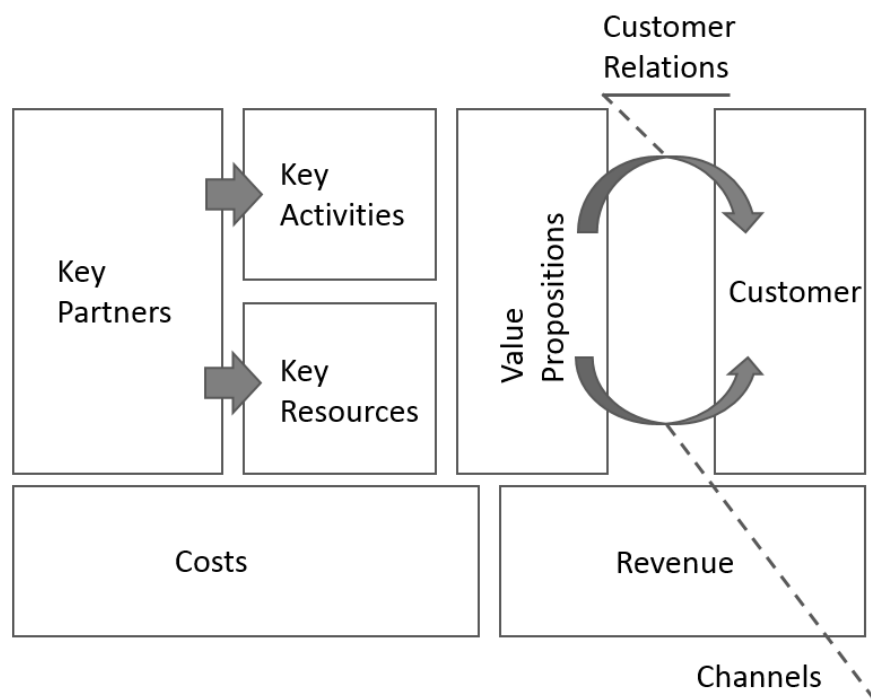
However, these tasks are all influenced by a handful of variables and are not simply to adjust. Besides new ideas and their implementation, customers are usually very passive in terms of business model innovation. The previously mentioned factors such as creativity and power that an entrepreneur would have to give up, the user would be forced to pick up as a burden. Therefore, the manager still has to set up hypothesis about the customers' demands (Sosna et al., 2010; Teece, 2010). Major elements of the parameters for a business model design are:

"... - content, structure and governance – that describe the architecture of an activity system; and design themes – novelty, lock-in, complementarities and efficiency – that describe the sources of the activity system's value creation." (Zott & Amit, 2010, p. 1)

Unfortunately, this only means that required resources are more difficult to achieve, since the modern technology only simplifies user-manufacturer communication, but not understanding of complicated information. Difficult tasks like tutorials on business model innovation, or even development, will demand more time from both sides and in the end lead to a lower participation (Chesbrough, 2010, Teece, 2010). At this point, the importance of carefully chosen TICs is approved. These tools have to be very detailed, while being simple and not exhausting. To ensure this, the concept of business models developed by Osterwalder &

Pigneur's was chosen to visualize the task for users. It is the same one that Tornblom and Hellman (2013) have chosen in their research. This circumstance should serve for a better comparison of the results in the end. The model is describes in figure 9 in more detail and contains 9 building blocks, i.e. value proposition, key activity, key resource, partnership, cost structure, revenue model, customer segment, customer relationship and distribution channels (Tornblom & Hellman, 2013).

Figure 7: Business Model by Osterwalder & Pigneur's



(Osterwalder & Pigneur's business model canvas, 2010, p. 18-19)

4.3. Implementation

Implementing the previously discussed resources is the most fragile part of this innovation concept. How is the newly found information to be processed? There are still difficulties, even after including customers into the R&D task and overcoming obstacles such as:

- The users' limited understanding of the company's business model,
- Organizing resources like time and money for more intensive evaluations,
- Raising the customer interest in participating.
- The problem of implementing business models developed by customers into practice.

According to Tornblom & Hellman's experience, not all suggestions coming from users are expected to be of value, nor are they constructive and some are even difficult to get used to (Tornblom & Hellman, 2013). Even after admitting the use of external innovativeness in terms of business model development, many scholars consider key activities a central part of a firm's business model and therefore always internal. In contrast, Zott was able to reveal the importance of social action, the coherent interaction and the potential of the active system perspective for business model development (Zott & Amit, 2010).

Apparently, one of the major tasks is establishing an equal partnership between both parties, i.e. the users and manufacturers. One way to achieve recognition on both sides is to prove their value for each other (Sosna, 2010).

Now, facing problems such as recognition and approval, there are different ways to demonstrate potential. Since business model innovations are, according to Sosna (2010), a major success driver for old and young firms, the interest in this topic grows constantly. One of the research areas was the trial and error path, which was chosen by some well-known companies. Struggling with decision making in exploratory and implementation areas at the same time, decision makers have to invest some of the performance for one direction. Investing rare resources into learning and development might lead to drawbacks and influence

other activities. The area of trial and error was defined by Sosna (2010) as an initial experiment with individual adjustment later on (Sosna et al., 2010). This trial and error task can be divided into:

“...certain triggers (typically external) – plan, design, test and retest alternative business model variants until they find the one that best suites...” (Sosna et al., 2010, p. 384)

This task includes the cooperation of decision makers or managers and stakeholders as much as customers. Figure 8, which reflects the interaction between companies and customers, also visualizes the trial and error process between users and firms. The interaction should last as long as the outcome is not satisfying for both parties. Knowledge, which results from permanent organizational learning by certain individuals, has to be diffused and passed on to all participants. Only a well-coordinated process can lead to a useful outcome in the trial and error approach for a business model renewal (Baden-Fuller & Stopford, 1994). Another aspect to be taken into consideration is the relationship between time and business model development. As Chesbrough and Rosenbloom (2002) mentioned, a significant number of successful companies adjusted their initial business model from their start-up phase. Summarizing the facts so far it will be obvious that:

- business model development is crucial for company success,
- resources have to be drawn from various sources and not only from users,
- a permanent trial and error process over time builds confidence between parties and is therefore vital for success.

(Rosenbloom, 2002)

If the collected and combined knowledge is based on the latest market situation and, consequently, demand, the company's chance of survival and success will increase. Since the purpose of business models is to generate value for all stakeholders and for the company itself, business model development appears to be essential for further existence. The process of trial and error reduces the all-in risk. Lead users possess crucial knowledge. It is only a matter of time until this chain of tasks and resources will be combined to a new output (Sosna, 2010).

4.4. Research Question

As in the previous part of this paper mentioned, shortening product life cycles and faster evolving market demands, need a new supplying strategy. The necessary flexibility is only achievable by the involvement of different rare resources. These resources consist mainly of knowledge, which companies often do not possess, or at least possess not completely. However, this factor is crucial for a successful and bright future, since profitability is a requirement for firms and is influenced by knowledge. For the extraction of this knowledge, social networks appeared to be of high value. Especially users, besides suppliers, competitors and substitutes, have been found to be the source with most potential and reliability. They have the ability to formulate their needs and even optimize these themselves (Chesbrought, 2003, Chesbrought, 2010, von Hippel, 2006, Hiennerth et al., 2011). Nevertheless, to do so, they need the right guidance from companies, which use modern tools for these tasks. Without guidance the TIC collected information would lead to inefficient or misdirected work.

Lead users who possess need- and solution-based information, according to Lüthje et al. (2004, 2005), are able to create both products and services of recognizable quality (Pötz & Schreier, 2012). This led to the question of the business model itself. Would customers be able to innovate an existing business model? After establishing that today's role of users appear rather passive, Tornblom and Hellman (2013) committed their research towards the question:

“What are the effects of user involvement in the business model innovation process?”
(Tornblom and Hellman, 2013, p. 31)

In this process, they focused on the role the customers inherit and the potential that can be triggered by a multi-phase survey, consisting of an idea generation part and an evaluation part. This concept of collecting data is called an idea generation contest and found previously use in studies (e.g. Pötz & Schreier, 2012, Pillar & Walcher, 2006). Their results stated that a bigger part of users have suggestions for improvements and solutions at the same time. However, it appears to be challenging to receive special solutions in certain areas, which leads to the predicted weaker solution-based innovation. Approximately 5% of all suggestions have been evaluated to be as very innovative and of high quality. However, the findings supported

the fact that lead users have especially radical and innovative ideas, which are often rated higher than others. Lead users are usually ahead of others in daily need evaluation and therefore possess the ability to supply companies with suggestions which appear to other costumers as especially new. Another important finding was that business model improvement is easier to manage than business model innovation (Tornblom and Hellman, 2013, p. 63). Since this fact was measured by comparing the means resulting from rated ideas suggested in different areas, it would be reasonable to expect the advantage of individuals in different for them comforting areas.

Nevertheless, the importance of lead users in business model innovation was confirmed. As a matter of fact, it was even pointed out that lead users are essential for future trends.

“Lead userness is the most important driver of describing novelty.” (Tornblom and Hellman, 2013, p. 65)

Furthermore, the logical conclusion can be made that future trends, which are best foreseen by lead users, and business model development, which are essential for future business prosperity, have a significant influence on each other. Therefore, the research question of this work is defined as:

“What potential does a user – integration into a business model development exhibit?”

5. User-Integrated Business Model Development of Eversport

After a fundamental literature review and establishment of the research question, this chapter describes the observed market, the company involved and the chosen method for data collection. Since this work will be compared to the findings of Tornblom and Hellman (2013), the approach will show similarities in many areas. However, the task is of deeper content, since the focus will be on business model development of non-existing services.

5.1. Present Model

Eversport GmbH is an Austrian startup founded in 2013. Its prime product consists of an online tool that allows to book sports activities. From tennis, golf, martial arts, volleyball, swimming, windsurfing, basketball to bowling and many more, there are various sports that people can choose from and book right away. Pursuing this strategy, Eversport unexpectedly faced a competitor. Just a short period after the initial market entry of Eversport, a competitor was founded under the name of “sportel.me”. Focusing on a smaller and more compact selection of sports, sportel.me was obviously a startup representing a doppelganger. After market evaluation, it was decided to approach sportel.me with a merge offer, which was successfully closed by creating a joint venture in 2014 (werbepanung.at, 2014).

Apart from its business concept, Eversport was interacting closely with sports clubs and over time a second idea appeared. The sports clubs they have crossed paths with seemed to possess a low online presence, but had many members interested in sports and therefore a significant part of Eversport’s targeted market segment. Recognizing these sports clubs as a resourceful and valuable market, Eversport decided to exploit it. Nevertheless, besides a guesstimate theoretical approach to this market, no business concept was chosen. The weak online presence in the form of simple and irregularly updated homepages or unstructured online media presence e.g. Facebook was omnipresent and therefore the theoretical frame was that of an online profile for all main sport club information and activities. Nevertheless, the implementation was completely free to interpret and adjust. A basic tool was programmed only for visualization purposes and used in the research process as imagination accelerator. Since the company was prepared to search for an innovative new solution, the options were defined with a high degree of freedom. Expecting a rewarding and potential market and having at the same time another business model to sustain their existence, the opportunity for an unconventional approach was given. The major purpose of this experiment is to increase

the benefits for both customers and the company, while providing the service at the same time.

5.2. Method

For discovering a potential market with an uncertain demand structures, an explanatory approach appears to be most fitting. Following Tornblom and Hellman's (2013) example, this paper uses the idea generating approach, which was already proved useful in previous research (e.g. Pötz & Schreier, 2012, Tornblom & Hellman, 2013).

However, since customers are not used to understanding complex business models, their freedom of idea proposals will be limited and piped (Nishikawa et al., 2013). This filter serves only the purpose of data management and therefore goal achievement. To achieve this goal, the company needs to be willing to look for a new business model, to have a target group of users and to launch an idea-generating contest in the end (Tornblom & Hellman, 2013). According to Pillar and Walcher (2006), this contest implies:

"...to ask a group of users to submit solutions to a given task within a given timeframe. The nature of a competition should encourage more or better users to participate, should inspire their creativity and increase the quality of the submissions." (Pillar and Walcher (2006, p. 310)

The environment of a competition often fosters more efficient data output, since competing parties receive additional motivation in outperforming other participants (Pötz & Schreier, 2012). Other beneficial side effects are additional creativity that is triggered by the reflection of other participant's ideas and the comparably low investment required by this kind of method (Pillar & Walcher, 2006). An idea-generating competition only requires a prize for the most responsible and successful ideas and a well-organized interaction with all participants. The prize obviously only needs to trigger the interest of each participant and therefore does not require an accumulated expense for all parties. However, the question of organization is of a different nature. Depending on the market, the amount of targeted participants, their responsiveness and the number of phases, the organizational effort may vary quite much. Naming business model development as a goal leads to the need of setting a definition for the term "new business model". Osterwald's and Pigneur's model presented in figure 9 builds a foundation of the business model perspective used in this work. Informing users about the goal and separating it in different areas such as the 9 blocks of this model increases the quality of supplied data (Chesbrough, 2010).

The available blocks have been value proposition, key activity, partnership, revenue model, customer segment, customer relationship, key resources, cost structure and distribution channels. The participants had opportunity to suggest ideas for these building blocks and the amount of submitted ideas was used as an indicator for the level of innovativeness. However, since there was no previous business model, the users had only the choice between either submitting ideas or leaving the questionnaire unanswered, rather than approving the current model. This situation basically represents the difference between an improvement and a development of a business model. For more active participation 2 prizes have been provided. Every participant was promised to receive a free premium membership for a year, also the membership for the future business model was expected to be free. A differentiation between a normal and a featured membership might be conceivable. The second incentive was of measurable value. Since Eversport recently started partnership with “Isostar”, an international sports drink supplier, they also used a €300 “Isostar” coupon as the first prize for the club with the best rated business model suggestions.

5.3. Empirical Research and Data Collection

Since the company was young and had a limited number of customers, the distribution was accomplished by a two-level contact. Representing a business to business solution (b2b), the project was targeting a defined number of customers and therefore a limited number of knowledgeable users who could submit useful knowledge. By concentrating on popular sports, the 6 sports of basketball, volleyball, tennis, soccer, curling and bowling have been determining the targeted clubs. Examining a list of sports clubs of the three big sports unions in Vienna led to a sample of over 250 clubs. Apparently, the data supplied by the three big sport unions called “Sport Union”, “ASKÖ”, “ASVÖ” was not up to date. This resulted in the previously described two-stage approach. The first contact served the goal of introducing the company, project, asking for participation and, more importantly, updating the data. The first update minimized the sample to a size of 195 sports clubs (n=195) that had the necessary features. Many of the entries were disqualified, because of double records or liquidation. The second contact was done by email, with a short explanation of the survey and a link to it sent to participating clubs.

The survey explained once again its purpose and presented a brief overview of how a possible sports-club online appearance could look like. Before the evaluation phase, all participants have been asked to spend at least 5 minutes with the prototype. Since the business model and therefore the product does not exist yet, it was necessary to bootstrap the participants' imagination with ideas where this project might go.

According to Toubia and Flores (2007), evaluation of user suggestions by experts is a less effective way. Users are apparently better suited to rate submitted ideas, since they have more knowledge about customer needs, as discussed in previous chapters. Following Tornblom and Hellman's research (2013), this work includes a second phase where the very same users will rate other ideas submitted for a new business model. Especially since the first survey revealed 71 suggestions in different business model blocks, the user-based screening appeared to be more promising (Pillar & Ihl, 2009). In the end, 25 of the 60 participating sport clubs submitted over 71 ideas in 8 different blocks.

The second questionnaire containing the submitted suggestions was sent out to all participants (n=195), regardless whether they submitted any ideas or not. The evaluation of other ideas should not be affected by this factor. Making sure no party would end up evaluating their own ideas, a strict assignment was conducted. Nevertheless, the amount of suggestions to evaluate needed to be limited and therefore no participant was asked to evaluate more than eleven suggestions, since concentration decreases dramatically over time (Toubia & Flores, 2007). All the surveys and their phases were conducted via a survey tool called "Questback", a product supplied by www.unipark.de (2015). Therefore, all participants had an individual number and could be sorted according to their performance.

Besides the customer evaluation, an expert evaluation was also conducted. The purpose was to collect both results and compare them in the end. The amount of ideas in this research was significantly smaller than that of Tornblom and Hellman in 2013 (N=212). Therefore, it made sense to use both strategies (Magnusson et al., 2003, Pötz & Schreier, 2012). However, even if there were fewer ideas collected, after Tornblom's and Hellman's filtering, their sample size also reduced dramatically down to 133.

Out of all customers questioned in this research, only 36,7% showed creativity by suggesting ideas for the business model development. Nevertheless, the ideas were packed in bundles of at least 10 and each bundle had quite a large group of evaluators, so it was possible to ensure that each suggestion was rated at least 5 times (Table 1). In the end no submitted idea had to be abandoned because of a bias. After filtering ideas that happened mainly because of

repeating content and low quality 43 ideas remained. After the second evaluation process, not a single idea had to be retreated and therefore all 43 ideas with over 292 ratings remained intact for research purposes.

Table 4: Distribution of Responses in Second Phase

	Distribution of evaluations			
	Five rating per proposal	Six ratings per proposal	Seven ratings per proposal	Eight ratings per proposal
Number of ratings	9	0	25	9

(Own Creation, following Tornblom and Hellman, 2013)

5.3.1. Sample Attributes

As previously mentioned, the sample size was 60 participants, whereas 195 potential users were contacted at least 3 times. This target group was filtered by the mentioned sports types and area affiliation. Since Eversport is mainly operating in major Austrian cities and is based in Vienna, only sports clubs from around the capital have been invited. The participants' age reaches from 23 years up to 74 years and the mean age of all respondents is 49,2 years with a SD of 13,4 years. More than 96,7% are male and over 51% are employed, 19,4% are retired and 14,5% are entrepreneurs.

It is very interesting to observe that every day, more than 60% of the participants are using the Internet for communication and organization of the club's day-to-day business, and further 30% are using it 2-3 times a week. Since Eversport is proposing to target especially the online market, it is crucial to realize that the Internet as a modern media is an unalterable necessity for 90% of the participants. Despite from the high mean age, it still appears that the internet is essential for organization and planning.

Another important fact is the knowledge and experience in business decisions. Since the participants are asked to develop a new business model, it is of interest if they possess a higher or lower business understanding.

Table 5: Distribution of Characteristics

Characteristics of sample			
	Respondents	Percentage	
Gender			
Male	58	96,7	%
Female	2	3,3	%
Occupation			
Student	3	4,8	%
Employed	32	51,6	%
Unemployed	3	4,9	%
Entrepreneur	9	14,5	%
Retired	12	19,4	%
Other	3	4,8	%
Experience from business decisions			
Yes	28	46,6	%
No	32	53,4	%
Experience from starting own firm			
Yes	17	28,3	%
No	43	71,7	%
Frequency of using internet for club purposes			
Every day	36	60	%
2-3 times/week	18	30	%
2-3 times/month	2	3	%
Less frequently	4	7	%

N=60

(Own Creation, following Tornblom and Hellman, 2013)

Out of 60 participants, 46% responded as holding jobs where they have to make business decisions and 28% even acquired experience from starting their own business. Surprisingly, these numbers are far higher than the ones from Tornblom and Hellman (2013).

Table 6: Mean and Standard Deviation of Characteristics

Characteristics of sample (n=60)		
	Mean	SD
Age	49,22	13,4
Lead userness	3,31	1,04
Personal creativity	3,52	2,26

(Submitted n=25)

(Own Creation, following Tornblom and Hellman, 2013)

5.3.2. Independent Variables

Contrary to Tornblom and Hellman's study, this research is conducted with a test-sample of users, which are the only knowledgeable representatives and are expected to be professionals. Their permanent occupation in areas that are supposed to be improved by Eversprot's service makes them an invaluable and non-replaceable source. However, according to previous research there are differences between lead users in any kind of group (Lüthje, 2003, Lüthje, 2004, Gemuenden, 2006, van Eck et al., 2011). This fact is not affected by the nature of the product, whether it is medical equipment, industrial products, sports equipment or software products. Since lead users are showing the same characteristics in this study as in the previous one, e.g. being ahead of trends and receiving high advantages from solving the discussed problem, they have been evaluated using a five-point rating scale in the same way as Franke et al. (2006), Franke and Shah (2003) and van Eck (2011) (Tornblom and Hellman, 2013). However, an additional indirect evaluation has been included in this six-point Likert scale. For testing the trend, the rating on the scale was influenced by answers provided by participants in the context of their new media usage. The starting value was 3 and depending on the answer, the rating went up to 6 points or down to 0 points. The usage of e-mails,

Doodle, Google Calendar and Facebook were counted as new media and increased the value, on the other hand communication via telephone / in person and using paper decreased the rating. The mean of this lead useriness resulted in 3,31 with a SD of 1,04.

As Tornblom and Hellman's study already mentioned, previous research by scientists supports the idea that business knowledge of users is essential for better-suited business suggestions (Hippel, 2005, Hippel, 2006). However, in the case of Eversport's business model development this variable might appear to have an even higher impact than in situations where products are developed. The expectations are handled in the same way as Tornblom and Hellman's study.

The last important factor was the personal creativity. This was measured by evaluating the submitted suggestions in the open questionnaire part. This part is closely connected to the improvement, innovation and developments evaluation of the dependent variables. Nevertheless, this factor is expected to have high influence on the innovation level, since creative users are more likely to submit valuable and unexpected suggestions (Kirton, 1976). The more suggestions are submitted in the 9 different areas of Osterwalder & Pigneur's model, the higher the rating of personal creativity would be.

5.3.3. Handling of Dependent Variable

This research is observing the role of users in business model development and has therefore a need to evaluate submitted ideas for new business models. Similarly to business model improvement, the three areas, i.e. degree of change, outcome and quality of ideas, will play the most important role for the observed field of study (Tornblom and Hellman, 2013).

The degree of change is measured by the amount of suggestions for different building blocks, as mentioned above, and suggested by Mitchell & Coles (2013). Tornblom and Hellman decided to follow Mitchell & Coles's suggestions for fragmentation in:

- status quo,
- improvement proposals,
- innovation proposals.

The status quo group did not suggest any changes, or in this case did not submit any ideas.

The improvement proposal group submitted from 1 up to 3 ideas.

The innovation proposal group was defined by submitting at least 4 and more ideas.

(Tornblom and Hellman, 2013, p. 45)

Even if this study is concerned only with the business model development concept, it was decided to choose the same subdivisions for differentiation of the development degree as Tornblom and Hellman did. Besides the willingness of keeping the similarity between the studies alike, the suggestion of only a few ideas in different blocks would not lead to a business model development, since too few suggestions are not representative for a model. Therefore, a certain amount of new ideas is required.

To estimate the value for customers and Eversport, an evaluation conducted by potential users and professionals was created. The main focus was on the usability of suggestions. Since a non-existent business model was evaluated, it would be difficult to rate novelty and feasibility. Many suggestions needed to be redefined or clarified. New business models might also contain partially old or already existing components, therefore it was decided to let participants rate only the usability. The ratings were provided on a seven-point Likert scale. However, since both sides, i.e. professionals from Eversport and participants of the survey, rated the submitted ideas, it is possible to compare the expectations and benefits for both parties (Tornblom and Hellman, 2013).

6. Findings

After contributing a literary approach towards the advantages of customer created business model improvements and comparing possible influences on a business model development, this part will analyze all results received in this study. Since Tornblom and Hellman's study concerned with a very similar topic, it is obviously that areas of research and comparing variable will be alike. Nevertheless, the business situations couldn't be more apart. Instead of analyzing the

"...effects of involving users in the business model innovation process..." (Tornblom and Hellman, 2013, p. 46)

, this paper concerns with an earlier step:

"What potential does a user – implementation into a business model development exhibit?"

The differences are obvious, since they have been discussed already, but the approach to evaluate the customer potential will be alike, except for few deviations. The focus will rest upon the degree of development and the quality of submitted ideas.

6.1. User responsiveness for business model development

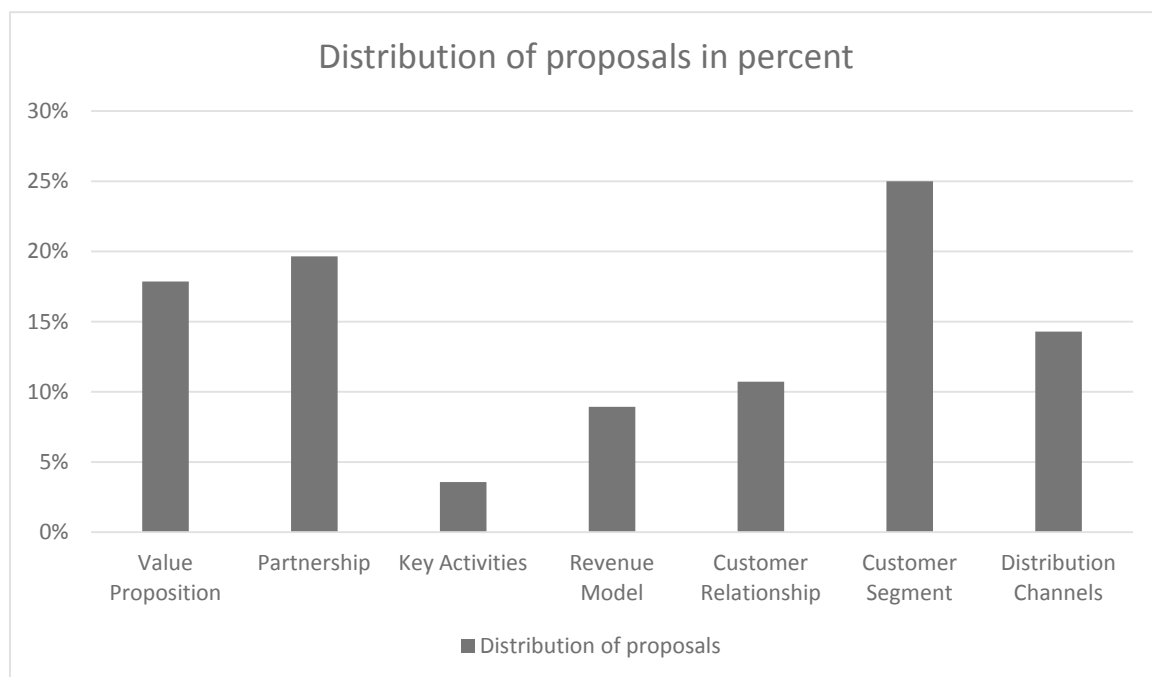
It appear to be a special challenge to face a development process for a business model, which is not tangible at the moment of questioning. It is not necessary a granting way to receive an optimal feedback referring to the curiosity of customers, but in the end, this represents the challenge. Dividing the results in three major areas the distribution of given suggestions in different blocks of the business model construct will be observed. Further tasks are, evaluating the degree of business model development and of course the quality of the submitted suggestions. The last part will be concerned with the regression of quality and degree of business model development.

6.1.1. Interest Distribution

As the first step the major understanding and responsiveness for the business direction was evaluated, whereas 71,5% of all respondents rated the direction of the Eversport club tool as useful and desirable. Approximately 18,5% were unsure and further 10% unlikely to use it at all. The results are down to a market with almost 90% of potential customers. This leaves an overall positive first impression for the suggested business model direction and allows these participants to adjust it individually in further process.

The distribution of all submitted ideas is showing a combination of different influences, which the participants experienced. Possible reasons might be understanding, creativity, reasoning and usability. However, figure 10 is illustrating the distribution in 7 different areas of Osterwalder & Pigneur's business model concept. The two blocks "Cost" and "Key Resources" have been removed, since the potential for misunderstanding would be too high. The block "Cost" is rarely close to the block "Revenue" and would endanger the results by confusing participants, as a similar situation might appear for the block "Key Resources" and "Key Activities". Some blocks display similarities and are common to be reduced under certain circumstances (Osterwalder & Pigneur, 2010). These "certain circumstance" could be described in this paper as the fact of the not existing business model, which still has to be developed by customers.

Figure 8: Distribution of Proposals



(Own Creation, following Tornblom and Hellman, 2013)

Apparently the blocks “Value Proposition”, “Partnership” and “Customer Segment” received the highest feedback by scoring at least 15% each, whereas “Customer Segment” is scratching even at 25%. The reason for this might be the concrete demand, or better feasibility of needs, as previously described. These three areas reflect the touching points between an existing problem and the user’s desire. Therefor an enhanced interest appears to disclose information upon these areas. Since users have less relation to Eversport and yet not existing business model, these problems obviously arouse hidden and not hidden demands and desires.

For a better understanding table 9 shows all questions that have been assigned to the 7 building blocks. The questions are developed to open and initiate the creative brainstorming without stumbling over the own lack of creativity. The first obstacle to appear was the unwillingness to submit creative user input without a certain guidance. As already mentioned this guidance is also recommended by other scientists and is therefore implemented by the following questions, which have been developed in collaboration with experts from the Eversport Company.

Table 7: Guiding Block Questions

Value Proposition Which marketing-tools and functions could be provided in future by the "Eversport Basis-Club profile"? Partnerships What kind of cooperation, or partnerships would be desirable in your opinion? Key Activities Are there functions or services which Eversport could provide that would increase the willingness to pay for? If so, how much would you be willing to pay? Revenue model What forms of payoffs or possible transactions could you think of? Customer Relationship How could Eversport create a great customer relationship? What is expected from Eversport? Customer Segment How would you distinct sport clubs in reasonable branches? Distribution Channels Which distribution channels are preferable? How is it possible to contact a wide amount of sport clubs?
--

(Own Creation, following Tornblom and Hellman, 2013)

These questions allowed to guide participants through the process of development even, if they belonged to the group with less experience in business decisions or business founding. However, the all in all responsive rate was around 42% and was containing mostly firm and sometimes abstract answer. If necessary, the questions have been brought in shape and corrected to simplify further evaluations. Table 10 contains a collection of submitted examples, which have been evaluated in the further process by the customers. If similar or same suggestions have been found only one of them was picked for the second phase.

Table 8: Suggestions Submitted by Participants

Value Proposition "Eversport should implement a financial supervision tool to coordinate membership payments." Partnerships "Eversport should establish partnerships with local sport shops. Sport club members would have the option to buy products with discounts." Key Activities "Accounting, member- and financial administration are modules, which might be reasonable pay-services." Revenue model "Advertisement and other kinds of labor-exchange as workshops might be reasonable forms for a transaction between Eversport and the club." Customer Relationship "Supporting the club in terms of sponsoring and channeling new members towards the club are essential point to develop a better relationship." Customer Segment "Interesting subdivisions might be: age, low- semi- professionals, team and single sport." Distribution Channels "A balanced distribution via popular channels as the internet / Facebook and on the other hand personal contact."
--

(Own Creation, following Tornblom and Hellman, 2013)

As in table 10 displayed most of the answers have been kept quite brief, which leaves a space for questioning. Nevertheless, it is an unusual situation for the participants. Therefore it is of no surprise to come upon this result. The extraordinary degree of freedom confuses and

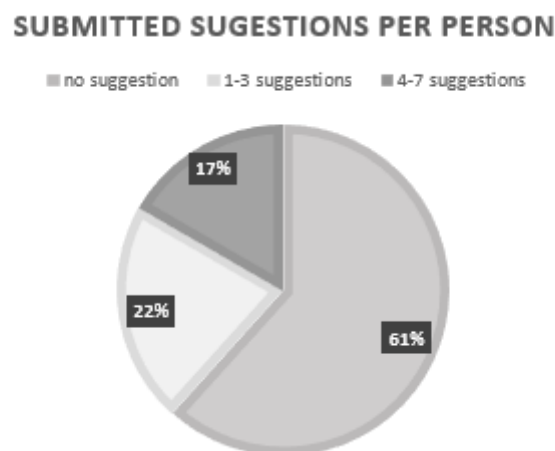
overwhelms some participants, since most expects a simple multiple or single choice questioning.

6.1.2. Degree of Development

Apart from the block distribution a more absorbing question is the degree of development the participants would deliver. Depending on the creativity, interest and involvement, the participants submitted a differing amount of ideas. Similar to Tornblom and Hellman we decided to follow Mitchell and Cloe's (2003) opinion, where the degree of innovativeness, in our situation the degree of development, will depend onto the amount of submitted ideas in different building blocks. As more building blocks are changes as more difficult it is for third parties to imitate the development (Mitchell & Coles, 2003).

According to this theoretical foundation with the given paper divided the total amount of participants into 3 groups. The first group represented the status quo, where no ideas were submitted. The second group consisted of participants with at least 1 up to 3 submitted ideas in different blocks. This was considered to be creative and leading opinion users. However, only the third group with 4 and more suggestions has been classified as opinion leaders and innovation leaders. The distribution was based on the feasibility of the not existing product surprisingly satisfying. The first "status quo" group consisted of 37 members and represented 61% of the whole sample. The second largest group was the "1-3 suggestions" group named the "improving development" group, followed by 17% of the smallest and most creative and innovative development group the "innovators" or lead users as represented in figure 11.

Figure 9: Sugestion Groups



(Own Creation, following Tornblom and Hellman, 2013)

Since this situation represents a more radical development approach with less feasible products, or business imagination, the distribution is not a classical innovation distribution as explained by Flemming (2007). Nevertheless, it represents the high potentials on the top of the sample and the following masses down below, but no bulky middle part.

Table 9: Characteristics of Change

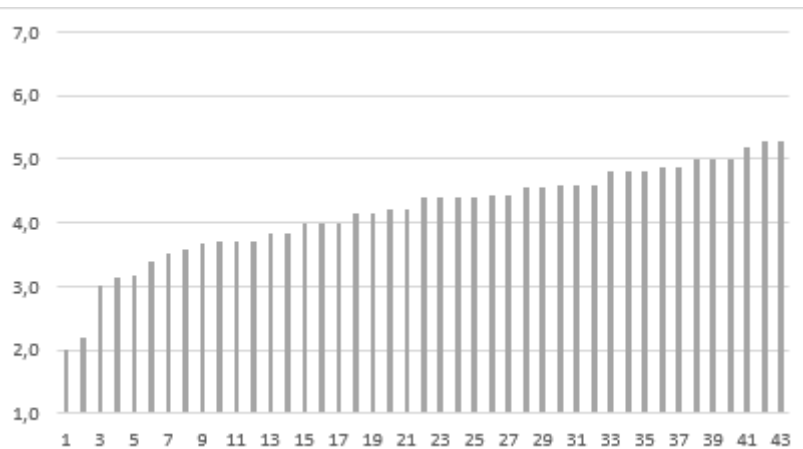
Degree of Change distribution submitted by users (n=60)			
	Mean	SD	Respondents
Improving Development	2,0	0,8	13
Innovators	5,7	1,2	10
Total sample	1,4	2,2	60

(Own Creation, following Tornblom and Hellman, 2013)

6.1.3. Quality Level in Relation to the Degree of Development

Only 43 of the received 71 suggestions made it through an intensive filtering process. As it was previously mentioned, submissions with a low feasibility and repeating ideas have been reduced to a minimum or removed completely. In the second part these ideas have been collected and forwarded to different participants, who had not submit these ideas in the first place. The results are displayed in figure 13. All ideas have been rated on a 7 point Likert scale. The mean of all ideas evaluated in the second phase was approximately 4,2, whereas 4 would represent a neutral rating on the Likert scale. More than 27 of all submitted ideas or 60% reached a rating above average (>4). However, the highest variance in idea rating is about 3,3 points and leaves the question of distribution between the groups of development.

Figure 10: Rating of all Submitted Ideas (Means)



(Own Creation, following Tornblom and Hellman, 2013)

Especially interesting seems to be the overall impression of the submitted ideas by the top 6,7% of participants. These extreme innovative participants, who submitted in all 7 blocks suggestions, reached a mean of 4,3 for all their ideas. This is an above average rating, but not as high as it might be expected. Therefore, a closer look was taken into the group results between the “innovators”, who submitted 4 or more ideas and the “improving development” group, who submitted from 1 up to 3 ideas. The results have been the most surprising. In contrary to all expectations the ideas of both groups have been rated in average almost by the same means. These unexpected results of both groups might appear because of this experiments nature. The extending area of novelty in a form of new development without existing structure seems to have higher influence on the participants than previously expected.

Table 10: Idea-Group Evaluation

Evaluation of ideas in Groups			
	Mean	SD	Sample size
Improving Development	4, 24	0, 62	43
Innovators	4, 20	0, 78	43

(Own Creation, following Tornblom and Hellman, 2013)

Unfortunately, users were unable to develop business models with a high degree of change in different blocks and an overall higher degree of quality. Further, they differ only in the amount of blocks which have been altered. This finding is actually taking another characteristic of the used sample in consideration. Besides the lacking feasibility of the business model and the following service, the participants are representing a group of above average skilled persons applying sport club demands. Since they are all chairman and handling related problems in day to day business, the submitted ideas don't differ much in quality. The reason for varying amounts of submitted ideas might depend on mood, time, feasibility or missing demand.

6.2. Evaluation of Suggestions by Professionals

For a two-site evaluation the suggested ideas have also been evaluated by 4 professionals who are working for Eversport. The experts rated the suggested ideas significantly lower than the participants as it is shown in table 12. Nevertheless, this lower rating is probably related to the reasoning of subjective opinion about the future business model and to firm expectations of the contest, which might not reveal the expected results.

Table 11: Evaluation by Experts

Evaluation of ideas in Groups (by Experts)			
	Mean	SD	Sample size
Improving Development	3, 50	0, 64	43
Innovators	3, 55	1, 02	43

(Own Creation, following Tornblom and Hellman, 2013)

In the end is to say, that quality alone doesn't necessary differ because of the innovativeness. Fewer submitted ideas don't make them less useful, but faster to copy and to implement for competitors. These findings result in a higher value of innovative participants, who submit multiple ideas, even if the rating of quality stays constant for these ideas. The overall value is growing. Nevertheless, the top ranked innovators, who submitted ideas in all areas, deserve a closer look. There is a comparatively high participation of these very creative users, who submitted in 7 out of 7 blocks. These 6,7% of highly innovative users are representing an especially valuable resource. Presenting many different ideas, these top innovators have a higher probability in delivering useful suggestions. Besides the probability these top 6,7% achieved a slightly higher rating with 4,3 points and a SD of 0,23. This leads to the conclusion that the score of these high innovative participants isn't significantly higher, but it is much more sustainable. The ratings have less discordant values, which leads to a much higher reliability.

The results present a new development situation, where they slightly differ from Tornblom and Hellman's (2013) outcome. It appears that customers tend to lose interest and desire to participate, if they face creative tasks without explanation how to do it. On the other hand, it appears the ideas have a constant qualitative level, which is unaffected from the degree of innovativeness. This again leaves reasoning for a constant and firm participation of creative minds. An above average rating of all ideas allows to interpret a basic positive tendency that reflected the user's knowledge and product expectations. Further, the top innovators in terms of business model development attest a far higher SD than all the other observed participants.

This is reason for expecting very innovative participants, who have enough knowledge about the market, to submit ideas with higher descriptive and explanatory power. Nevertheless, the quality and explanatory power of less innovative customers should not be considered of less value.

7. Conclusion

According to the findings described in the previous chapter customers integration effects are not scalable in all dimensions. The observed effect of creativity and demand for innovation is apparently bond to certain conditions. This study found similar effects between individuals comparing to other studies as e.g. the top 6,7% reached a slightly higher rating of 4,2 for their ideas than the average did. However, the remaining participants did not clearly reach a significant differentiating result. The reason for differences between this study and the one of Tornblom and Hellman are to be found in various points. A major point will certainly be the basic concept between a business model improvement and a business model development. The absence of a business concept appears to represent a bigger obstacle than expected. As earlier discussed people tend to miss a strait interest for participation in development process without a proper stimuli. These stimuli might consist of various concepts. One of the most important concepts is the benefit of usability. Customers modify products, or concepts for the purpose of their own satisfaction while using the improved concept. In the case of “Eversport” this concept didn’t exist and no user were familiar with the company’s business and didn’t see therefor need for improvement, or their own benefit for creating a business concept. The next reason for innovation is the process reward. Once again the people have been missing the aspect of understanding and personal relation towards the product. This certainly led to a less interesting innovation process and in the end to a process of lower productivity. All participants have been occupying leading management positions in different sport clubs, which are usually declared as a second job. Therefor the work pressure and the perspective of limited usefulness for the clubs at the present time, might had as well a negative influence on the factors of creativity and passion.

These drawbacks have been tried to be equaled by the offer of a free premium membership of the future product and an additional coupon for sport drinks. Nevertheless, these incentives have not the same effect as might have a price offered by a known company, which service is already of interest for the customers as in the case of “Filip&Frederik”. The pure fact of having a private interview with the moderators is of more value to individuals than receiving an unknown service and the chance to win a coupon.

Another complication appears to be the survey freedom offered to participants. Many participants stuck to the survey before the part of open questions. Allowing participants to ignore answer options, increases the probability of skipping questions. Especially in complex tasks as business model development. A certain control is hardly recommended.

This control and guidance has to be developed in TICs and further adjusted, since it can significantly change the survey outcome

After analyzing the participants and experts evaluations, there appeared obviously a difference of anticipation in which direction and what kind of service this platform would supply in the future. This is very positive, since experts are able to adjust their expectations, concept and receive the authentic market demand. Obviously, this leads to a risk reduction, especially if unexpected differences are found. Incorporating different groups with various perspectives increases the success rate, but on the other hand increases the mentioned coordination and explanatory effort.

Besides the process difference of the both studies, this study has a smaller sample, which results from the amount of sport clubs declared as potential customers and their participation rate. This small sample showed an interesting insight into the performance of participants facing an unknown business model, which almost unlimited options for improvement. However, this is at the same time an obstacle. Many users who don't get close in touch with this concept won't see an advantage by improving or developing something unknown.

Future studies should keep these facts in mind. Well-known business models have the advantage of brand awareness and existing customer-fans. These "fans" represent customers who are often willing to spend and invest a higher amount of time and patience for a developing process (von Hippel, 2006). Since the market nowadays reaches a condition of high connectivity, new ways of problem solutions are available and more important should be used. Ignoring the fact that knowledge is easier to acquire than ever before, will lead to a less favorable and competitive situation. New media has to be used and exploited for the company's advantage. Firms that will ignore to channel knowledge, demands and creativity through the internet by using their customers, will face decreasing competitive advantages and therefor endanger market shares.

An interesting field for future studies might be the business model evaluation by customers. Different business model could be introduced and already existing users are asked to evaluate these concepts and additionally submit suggestions for changes. This would give the opportunity to develop new business models by using foreign customer-knowledge, which evolved from established concepts. The resulting business model concept would contain users demand, innovative improvements and seasoned parts off competitive concepts resulting in a formidable competitive advantage.

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Appendix:

Abstract 1

Diese Arbeit befasst sich in erster Linie mit der Einbeziehung von Kunden in den Businessmodell-Entwicklungsprozess. Angelehnt an die Arbeit von Tornblom und Hellman (2013), in der es um den Effekt der Kundenintegration in den Businessmodell-Verbesserungsprozess ging, wird hier ein Schritt weiter in Richtung Businessvorbereitung gewagt. Durch das Befragen von potentiellen Kunden über einen möglichen Businessbereich werden Daten gesammelt, die Bedürfnisse und Innovation festhalten sollen. Diese Studienteilnehmer werden gebeten unterschiedliche Vorschläge in mehreren Gebieten für ein Geschäftsmodell vorzulegen, wobei auch über ihr Verhalten und Angaben, Schlussfolgerungen über Ihre Rolle als „Lead User“ gezogen werden. Das Ziel dieser Arbeit ist es Wissen potentieller Kunden in den Entstehungsprozess von Geschäftsmodelle einzubeziehen. Schlussfolgernd wird ein Vergleich zu der Studie von Tornblom und Hellman gezogen und beurteilt inwieweit ein noch früherer Einsatz von Kunden in einen Geschäftsentstehungsprozess effektiv ist.

Abstract 2

This work focuses on the process of implementing consumers into business model development. Following Tornblom and Hellman's (2013) work, where the effect of customer implementation in business model improvement was analysed, this work takes a step further toward business preparation. By interviewing potential customers in a probable area of future activity, data are collected, which are supposed to contain demands and therefor might lead to initiated innovations. These participants are asked to suggest ideas for different areas of a business and therefor sustainable influence the business model in whole. Further, by analysing their behaviour and data input, there are conclusions made about the participants "lead user"-potential. This works goal is to implement the knowledge of potential customers into the process of business model development. In the end this work will be compared with Tornblom and Hellman's (2013) paper and a conclusion will discuss the effectiveness of an earlier point of customer integration into business model development.

CV

Alexander Hoffmann

03.2012 – 04.2015	University of Vienna <i>International Business (M. Sc.)</i> <i>„Innovations- und Technologiemanagement“</i>
10.2008 – 10.2011	University of Leipzig <i>Bachelor of Science (B. Sc.)</i>
10.2010 – 04.2011	Manchester Metropolitan University <i>International Business Exchange Program</i>

Datenanalyse:

Die dreistufigen Umfragen wurden im Zeitraum September 2014 bis Januar 2015 durchgeführt.

- 195 Sportklubvorsitzende aus den Dachverbänden “Sport Union”, “ASKÖ”, “ASVÖ” wurden telefonisch kontaktiert und daraufhin ein Fragebogen zugesendet
- 60 Studienteilnehmer wurden wiederholt in 2. Runde befragt
- 5 Mitarbeiter des Unternehmens Eversport GmbH wurden befragt
- Die Umfragen wurden mit dem Umfragetool www.unipark.de durchgeführt

Alle Daten wurden selbstständig erarbeitet und ausgewertet.