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INNOVATION AND RELATED
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Innovaatiota ja innovaatiotoimintaa korostetaan yrityksissä suurissa määrin. Yritykset pyrkivät olemaan parempia ja ainutlaatuisia omalla alallaan ja innovaation kautta ne pystyvät antamaan lisäarvoa yritykselleen. Moni näistä yrityksistä kutsuu itseään innovatiiviseksi yritykseksi, vaikka eivät välttämättä tiedä, mikä innovatiivisen yrityksen oikea määritelmä on.

Tämän opinnäytetyön tavoitteena on määritellä innovaatio ja sen eri näkökulmat. Lisäksi yksi päämäärä on saada selville mikä on motivaatio innovaatioon yrityksissä. Teoreettinen pohja selvittää innovatiivisen yrityksen tunnuspiirteet ja erilaiset innovaatioon liittyvät toiminnot. Näkymiä innovaation tilasta EU:ssa esitellään myös.

Tämän opinnäytetyön tutkimus tehtiin mixed methods-tutkimusmetodia käyttäen. Kaksi yritystä valittiin tutkimukseen ja lisäksi kysely lähetettiin kahdelletoista satunnaiselle innovatiiviselle yritykselle, joista saatiin yksi vastaus. Kysely lähetettiin sähköpostin kautta. Tulokset osoittavat, että motivaatio innovaatioon on riippuvainen teollisuudenalasta ja siitä, millaisia tuotteita yritys tarjoaa. Toisaalta, yrityksen koko vaikuttaa siihen, minkälaisia innovaatio- ja siihen liittyviä toimintoja yrityksellä on. Innovatiivisen yrityksen tunnuspiirteet eivät osoita minkäänlaista riippuvuutta kumpaankaan näistä tekijöistä.

ABSTRACT

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Innovation and innovative activities are emphasized in companies to a great extent. Companies are striving to be better and unique in their field and through innovation they are able to give added value to the company. Many of these companies are calling themselves innovative without knowing the real definition of an innovative company.

The aim of this thesis was to define innovation and its different aspects. Also, finding out the motivation for innovation was one of the objectives. The theoretical framework will identify the characteristics of an innovative company and the type of activities related to innovation. An outlook of the situation of innovation in the EU was discussed.

The research of this thesis was made by using the mixed method of study. Two companies were chosen for the research and additionally the questionnaire was sent to twelve random innovative companies from which one answer was received. The questionnaire was sent by email. The results show that motivation for innovation is dependent on the type of industry and products offered in the company. On the other hand the size of the company affects what type of innovation and related activities there are in the company. Characteristics of an innovative company show no dependence on either of these factors.

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1 INTRODUCTION

In the first chapter of this thesis the structure of the thesis is presented. This will tell the reader how the thesis is structured and what information will be given in each section of this thesis. In addition to this, the introduction part will describe background of the study. This will present the literature behind the theoretical part of the thesis as well as give a better understanding about why it is important to research innovation in the companies. The studies already conducted about this topic will be discussed. Also, in this chapter the research problem, research methods used and objectives will be presented.

1.1 Background of the Study

In today's business innovation is emphasized by many companies because more globalized and converging markets makes it challenging for them to be different and stand out. (Desouza, Dombrowski, Awazu, Baloh, Papagari, Jha & Kim 2009) Economic uncertainty is also one of the challenges in today's business. Hence companies are striving to find new innovative ways to improve their products and process to meet their customers' needs and wants. The companies are continuously trying to innovate in order to bring value-added to the company. Effective and efficient innovation can bring competitiveness and growth for the company. (Steiber & Alänge 2013; Frederick, Lam & Martin 2014)

Innovation and aspects that are related to this are studied widely as well as the different activities that are related to innovation such as R&D. (Steiber & Alänge 2013; Baregheh, Rowley & Sambrook 2009; Salavou 2004) Innovation itself have been defined and conceptualized in many different ways. It is a very broad concept that has different aspects and activities related to it. (Salavou 2004) Also, companies are becoming more innovative and trying to find the core of innovation in their activities and operations. They want it to become a part of their company culture. (Rao & Weintraub 2013) Still, there is no clear definition for innovation that would cover all the concepts and aspects related to this, which makes it

difficult for companies to define themselves as innovative company as well. (Baregheg et al. (2009)

1.2 Research Problem and Objectives

As already stated before, there is no universal definition for innovation. This is why people nowadays use the term innovation too freely without really knowing what it means. It is important to define this term and different aspects related to it. Many companies are focusing on innovation but do not know which parts of the company should be improved in order to be more innovative. It is also vital for companies to understand how to encourage innovation in order to become more efficient and effective in regards of innovation. (Frederick et al. 2014; Desouza et al. 2009)

The aim of this thesis is to identify innovation and different aspects related to it. The objective is to identify an innovative company, its characteristics and types of activities. To understand various motivations for innovation companies from different industries and sizes are compared. Also, through this comparison, similarities and differences between innovative companies can be recognized and which drivers affect to these factors.

The research method used in this thesis is a mixed research method which combines both qualitative and quantitative research methods. Two companies were chosen to the research in advance. The questionnaire was also sent to twelve randomly chosen companies that are operating in Finland from which one response was received. Altogether, three companies answered the questionnaire that was sent by email. From these an analysis is made based on the theoretical framework that is a literature review of related literature on innovation.

1.3 Structure of the Thesis

This thesis contains four different segments: introduction, theoretical part, empirical part and conclusions. The introduction presents the research problem,

the aim of the thesis, the research method and the structure of the thesis. Moreover, different segments are described in the introduction part.

The theoretical part gives a theoretical framework for the empirical part. This part starts by defining innovation and introducing research and development as well as different investment methods for innovation. This continues by identifying characteristics that define an innovative company. Finally, an outlook of innovation in the European Union is discussed.

The focus of the empirical part is on the research conducted. This part presents the results received from the questionnaire. It also presents the research methodology used when conducting the research. After this the results are analyzed and conclusions are drawn in the conclusion part. Suggestions for the companies are given as well as topics for future studies.

2 INNOVATION

In this chapter the term innovation will be defined and the distinction between invention and innovation will be made. Innovation can be seen as a process and the different steps of the innovation process will be presented. The different types of innovation will be defined through Tidd's 4P model which companies use to map their innovation and to see where there is still space for innovation in their company. There are different aspects in innovation which are also presented in this chapter. Company's research and development activities are usually mixed up with innovation activities, thus differences between these will be discussed. Finally different investment methods for innovation will be presented.

2.1 What is innovation?

The word innovation is widely used in everyday language as well as in professional situations. Usually people are not aware of the real meaning of the word and might use it in a context where it necessarily should not be used. Innovation is often confused with the word invention and thus used in a wrong situation.

According to OECD's definition (Oslo Manual 2005; cf. Martins & Terblanche 2003) "innovation is the implementation of:

- new or significantly improved product (good or service)
- new or significantly improved process
- a new marketing method
- a new organizational method in business practices, workplace organizations or external relations"

The distinction between invention and innovation is made through this definition. All technical or similar ideas, novelties or renewals are inventions. Invention usually precedes innovation and it becomes innovation only if it benefits the inventor or some other user economically. Patents are one way to define an

invention because to receive it the invention should be completely new compared to other corresponding inventions. (Lemola 2009)

2.2 Innovation process

Innovation can be seen as a process involving four continuing steps. A successful innovative company is continuously improving each step of the innovation process through learning more about its processes, products and services. When the steps are managed and monitored effectively the strengths and weaknesses of the company can be discovered. (Tidd & Bessant 2009; cf. Desouza et al. 2009)

The first step in innovation process is search, which means recognizing opportunities and threats in the environment that could potentially contribute to a change. Market research is one of the tools companies use to find an opportunity for a new technology that can be pressure from the markets such as customer needs or competition. Changing technological requirements or legislative actions can be seen as threats that result to a change in a product or a service. Also the R&D activities of companies search for new ideas and innovations. (Tidd & Bessant 2009; cf. Steiber & Alänge 2014)

Selection is the second step in the innovation process. The company should ensure that it is familiar with its core competencies, products and services; different equipment, systems and people that they involve; and how these are created in the most effective way. This way the company is able to define the suggested change and generate an innovation strategy should be made fit with its overall strategy. (Tidd & Bessant 2009; cf. Desonza et al. 2009)

The third step is implementing, which is the most expensive and time consuming step in the innovation process. In this stage the company makes research about the innovation in order to gain more knowledge about demand in the markets and technological aspects. The company modifies and develops the innovation in a way that it is user-friendly and ready for the market. Then they are able to learn about feasibility of the innovation and whether or not it needs to be refined. (Tidd & Bessant 2009; see also Steiber & Alänge 2014; cf. Desonza et al. 2009)

The last step in the innovation process is capturing, which involves examining the benefits of the innovation. It can have created added value for the customer or gained a bigger market share, cost reductions or commercial success for the company. Customers and feedback from them play a big part in this step. Even though the innovation would have been a failure critical for the company is to know how the process should be improved for the next time. (Tidd & Bessant 2009; see also Frederick et al. 2014)

2.3 4P innovation model

Innovation means a change but it can be seen in different areas of a company. Therefore it can be divided into four different dimensions shown in Figure 1. Product innovation mean the changes in the products and services that are offered by the company. These kinds of changes can include, for example, a new design of a mobile phone or a new holiday package. Process innovation means changing the method in which the product or a service is created or delivered. This can be for example changes in the way the mobile phone is manufactured or how the new holiday package is delivered to the customer. (Tidd & Bessant 2009; cf. Refaat & Alsanad 2013)

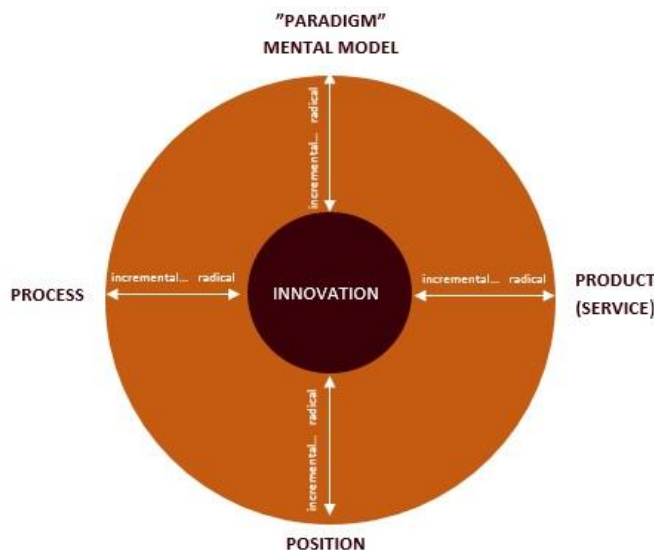


Figure 1. 4 P Model (Tidd & Bessant 2009)

When the context of a product or a service is repositioned it is about position innovation. For example, changing the target group of an established product or a service to a whole different one can be this type of an innovation. Paradigm innovation is the change of the fundamental mental models which define what the organization does. By changing people's mindset of an unhealthy product to a healthy one could be one example of paradigm innovation. (Tidd & Bessant 2009; cf. Refaat & Alsanad 2013)

In some cases product innovation and process innovation are challenging to distinguish from one another. Usually service is a type of innovation where these two come together. For example, a new cruise ship includes both the process innovation as well as product innovation. (Tidd & Bessant 2009)

The 4P model is used as a framework for organizations to map their innovations. By mapping their current innovation projects on the framework the organization is able to see where there is still space in the map. For example if the organization is focused on product and process innovations it has more space in paradigm and position innovation. Then the organization should focus its future innovation projects to these parts of the model. (Tidd & Bessant 2009; see also Refaat & Alsanad 2013)

Also, this model can be used for competing organizations in the same market. By doing this the organization can find new innovation opportunities that arise from the free unmapped space in the framework. (Tidd & Bessant 2009; see also Refaat & Alsanad 2013)

2.4 Aspects of innovation

The degree of novelty in innovation can be radical or incremental. A radical innovation for a small company can be an incremental one for a multinational organization. This is why the innovation is rather a perceived degree of novelty because it can be seen differently in different situations. (Tidd & Bessant 2009)

Radical innovation has significant economic, social or cultural impact. It usually has changed the way and circumstances of operating in organizations and of private citizens. Radical innovation initiates a wide and long-term process of change. It changes the way we use a product or service and the way we think about them. (Lemola 2009; cf. Refaat & Alsanad 2013)

Incremental innovation means changes in already existing innovations. Continuous improvement in processes and products is essential to every organization and it is widely focused on. Additionally, incremental innovation is more common than radical one since it involves day-to-day changes, optimization and developing existing products and processes. (Tidd & Bessant 2009; see also Frederick et al. 2014)

One aspect of innovation is discontinuous innovation which means that there are some changes in the industry or markets that create new conditions that require a change such as emerging new markets and technologies or political and regulatory rules come into existence. Also sudden tragic events that cannot be predicted or new business models through new competitors in a market are part of discontinuous innovation. In the case of these events the company needs to adopt to the situation and create new ways to keep the business successful. (Tidd & Bessant 2009)

2.5 R&D and innovation

Typical way of thinking is that innovations are a result of research and development (R&D) which results to comparisons between these two. They are sometimes even used as synonyms. Although they are very close to each other there are significant differences between them.

R&D means systematically trying to get more new knowledge and using this knowledge to find new applications. This includes basic research, applied research and development work. Basic research means experimental or theoretical search of information that does not have direct practical application. On the other hand, applied research aims to use some new knowledge to execute practical

application. This can include creating new procedures and practices to solve a particular problem. Development work is improving existing or creating products, services and processes through new knowledge or research results. (Frascati Manual 2002)

Operations related to innovation are seen more comprehensive than R&D operations. This is because the education given in the organization connected to developing and producing a new product is involved in innovation. Also it includes the new or enhanced product, marketing of a service or process as well as the preparations that are involved in starting the production of a new product. (Lemola 2009)

2.6 Investing in innovation

Companies need to invest in innovation in order to maintain economic growth as well as innovation activities. Also companies want to get more market share, reduce costs or become more productive. Through increasing competition and customers' being more aware of their needs and wants innovation has become more and more important for the companies. (OECD 2011)

Usually when discussing investing into innovation people think about research and development (R&D). R&D is easy to understand and the amount of spending can be measured easily. Companies use either their own resources to invest in R&D activities or they can receive benefits from different public support programs. Also governments can have different incentive programs for innovation in the country. These can be either direct support which means grants, loans and procurement or indirect support which includes for example various tax incentives towards R&D. In addition companies can cooperate with other companies and do joint R&D. Usually bigger companies have the resources to have their own R&D departments. Smaller companies are then more dependent on public support in order to be able to fund their R&D activities if they have any. (OECD 2011; cf. Frederick 2014; see also Artz, Norman, Hatfield & Cardinal 2010)

Companies need to make the “make or buy” decision which means that they can either make the innovation themselves or buy it from an external source. Acquisition of machinery, equipment, technology and other external knowledge is thus one of the options for the firm to invest in innovation. This is usually considered as outsourcing its R&D activities and gaining knowledge, information or resources from an external source. As R&D activities are mostly seen as very expensive and time-consuming some companies see the opportunity to just buy these from someone else. The acquisition from an external source usually involves licensing, patents and trademarks which involve different risks and contracts. Also the use of consulting agencies and R&D contracting are some of the means of acquiring external technology. (Cassiman & Veugelers 2000)

Whether the company has its own R&D activities or it decides to acquire the technology from an external source intellectual property (IP) should be taken into consideration. IP rights should be considered when a company has created something new and it needs to be protected. The company can apply for a protection depending on the type of innovation through different means such as trademark, patent or design innovative company. Also licensing is one of the ways to protect an idea or a concept. (Rogers 1998)

3 INNOVATIVE COMPANY

There are many aspects that define an innovative company. In this chapter these different characteristics of an innovative company are presented. Firstly an innovative company should have a clear vision and an innovation strategy. Innovative company also identifies its employee's competences and puts the right people to the right positions. Collaboration, networking and information sharing are vital for an innovative company because they increase the amount of innovation and new ideas in the company. Customer focus and strong company culture are important characteristics of an innovative company as well as managing their technology well.

3.1 Vision and Strategy

An innovative company needs to have a clear strategy and vision that aim towards future. With clear goals the company is able to determine the path and directions where it is headed. When a company shares a common vision and strategy for innovation its interest and concentration becomes consistent. Consequently everyone in the company is aware of what is expected from them and are more focused. (Tidd & Bessant 2009)

The aim of innovative companies is to be excellent and such a company that the customers will choose over others. These companies create themselves a vision which targets to develop a product that exceeds in performance and offers a strong position in the market. The employees are determined to find creative techniques and means reaching the objectives by having a straightforward drive. (Lawson & Samson 2001)

Strategy determines what actions should be taken in order to reach the targets set. It specifies how the resources, processes, products and systems are working in case of ambiguities in the environment. Innovative companies have an innovation strategy that focuses more on the future and creating something new. Additionally, these companies have strong directions on developing their

activities by, for instance, lowering costs and improving quality. (Lawson & Samson 2001)

3.2 Competences of Workforce

Having the right kind of a workforce that focuses on innovation strategy and vision is critical for an innovative company. The employees should be motivated to build innovations and create new ways of doing things. The company needs to identify the competences that each employee has and direct these resources where they are required. (Lawson & Samson 2001)

Innovative companies recognize and reward their employees for creating innovation initiatives. By doing this the companies enhance the willingness and likelihood of employees to make suggestions of innovations. Additionally these companies have the ability to combine the competencies with correct markets and technologies which gives the employees the motivation to do their best. (Terziovski 2007)

Training and continuous improvement in knowledge is highly appreciated in innovative companies. These companies want to further develop their workforce to become more competitive and creative. This also includes enabling job rotation in order to see, for instance, what can be developed in another process. Furthermore, rearranging job profiles gives employees more knowledge of what other people are doing in the organization. (Terziovski 2007)

3.3 Collaboration, Networking and Information Sharing

Collaboration with external partners is one of the crucial areas in innovative companies. In order for innovative companies to continuously improve and develop their knowledge and information base they need to have strong ties with their external partners. By, for instance, having conferences, workshops, seminars and discussing with scientists on a regular basis as well as collaborating with universities the company can enhance its amount of innovation. (Terziovski 2007; see also Steiber & Alänge 2014)

Close collaboration with suppliers gives value for the company, supplier as well as the final customer. Hence, a lot of emphasis is put to the relationship with the supplier in an innovative company. When a company and its supplier are in contact they can get feedback and create long-term cooperation which results in giving the best end product for the customer. Discussions with the suppliers and the customers can give valuable information for the company about their performance and characteristics of existing as well as new products. This way the company can share ideas and improve its products in a way that it meets the customers' present and future needs. (Terziovski 2007)

Networking with different people, organizations and partners is one of the most important sources of information for a company. By doing so the company is able to conduct environmental scanning and see different opportunities outside the company. Various resources and emerging markets that would have gone unnoticed can be discovered through networking. Especially in today's business world when it takes far less effort to be in contact with global partners and experts via the internet. This allows companies to have international exchange of information and, thus, make them more competitive. (Terziovski 2007)

Information sharing within the company is very important. This can be done through training sessions and seminars, supporting group projects and informing personnel through intranet. It ensures that the knowledge is shared effectively among regular team members. Information sharing across the company borders can also be done by having close relationships with external partners. The company should define the competencies and knowledge that each person has. This makes it easier to connect the right people with the correct knowledge. (Tidd & Bessant 2009)

3.4 Customer Focus

An innovative company has its focus on the customers and wants to satisfy their needs and wants. They want to engage customers into innovation processes in order to establish strong customer satisfaction and commitment in the early stages

of innovation. Also, continuous research on customers' needs and preferences gives the company a direction where the industry is headed. (Terziovski 2007)

The highly innovative companies gain the motivation when they can give something for the society. They are not only improving or developing something in their product or service but also improving the quality of life and helping society work and communicate better together. (Coudhary 2014)

Strong communication with customers through research, feedback and development ensures that the company will provide a suitable result in the market. By doing so the company is able to create value for the customer and make such innovations that the customers really need. (Terziovski 2007)

3.5 Company Culture

Company culture defines the values, beliefs and norms in the company which are often influenced by the CEO and senior management. This influences the behavior of people in different situations like how to deal with customers and also innovation. Values determine the aim of the company regarding its processes, employees and customers. Beliefs are the expectations people have about themselves, their customers and their company. Norms mean the accepted behavioral guidelines that define for instance how people dress and interact in the company. The company culture underlines the attitudes towards, for instance, risk, ethics, professionalism, innovation and planning of processes. (Framholtz & Randle 2012; see also Martins & Terblanche 2003)

Innovative companies are engaging into a culture that supports information sharing and, of course, innovation. The members within the company are certain that innovation endeavors require knowledge sharing and that they are expected to do so. The company culture in innovative companies involves taking risks, thinking creatively and having strong focus on customers. By perceiving the employees' achievements and encouraging them to take risks the company is creating a culture and a mindset that promotes innovation, entrepreneurialism and open environment. (Terziovski 2007)

3.6 Technology Management

Technology management is a very important aspect in an innovative company. Managing technology means everything that is related to the innovation process and how it is managed. These include, for example, the R&D activities and innovation strategies. An innovative company is aware of all the stages in the process and makes sure that everything is done effectively. Technology management requires environmental scanning which gives information about customers and competitors. Also, it specifies if the technology is produced in the company or acquired from somewhere else. (Kropsu-Vehkaperä, Haapasalo & Rusanen 2009; see also Artz et al. 2010)

4 INNOVATION IN EU

In this chapter an outlook of the state of innovation in the EU is presented. In this chapter two articles were used to give an understanding of the state of innovation. First the results of Innovation Union Scoreboard 2014 will be presented which tells where the countries are individually now regarding innovation. Then, the overall state of innovation in EU will be analyzed. Some suggestions and improvement areas are discussed also.

4.1 Innovation Union Scoreboard 2014

The Innovation Union Scoreboard (IUS) is a research that is conducted every year. It assesses innovation performance in EU member states and compares them to give understanding about their research and innovation systems. The aim is to give suggestions to countries in which areas they need to improve and in which they are already successful. IUS uses current data available from Eurostat and other internationally recognized sources. (Innovation Union Scoreboard 2014)

4.1.1 Performance Groups

IUS has divided EU member states into four different performance groups (Innovation Union Scoreboard 2014) according to their innovation performance which is compared with the EU average innovation performance:

- Denmark, Finland, Germany and Sweden belong to the first group which is the *innovation leaders*. These countries' innovation performance is more than 20% above the EU average.
- The second group includes Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, the Netherlands, Slovenia and the UK. These *innovation followers* have their innovation performance less than 20% above, or more than 90% of the EU average.
- *Moderate innovators* are those countries whose innovation performance is between 50% and 90% of the EU average. Croatia, the Czech Republic,

Greece, Hungary, Italy, Lithuania, Malta, Poland, Portugal, Slovenia and Spain belong to this group.

- The last performance group includes Bulgaria, Latvia and Romania. This group is *modest innovators* which means that their innovation performance is less than 50% of the EU average.

4.1.2 Indicators

The Innovation Union Scoreboard differentiates three separate main indicators that are then further divided into eight innovation dimension. These are totaling to 25 indicators that measure innovation performance in the member states. The indicators are presented in Figure 2. (Innovation Union Scoreboard 2014)

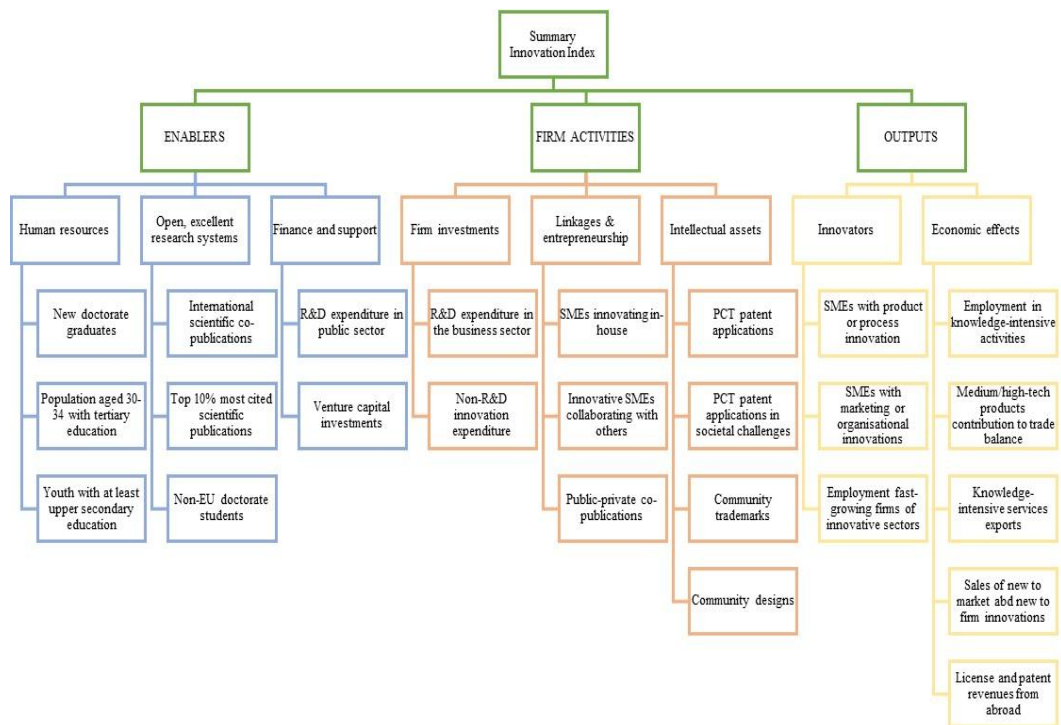


Figure 2. Summary Innovation Index (Innovation Union Scoreboard 2014)

The main drivers for innovation performance that are external to the firm are called the *enablers*. The first dimension is the “Human resources” which determines the high-skilled and educated workforce available. The countries that perform best in this dimension have great deal of workforce that is skilled enough

to take part in and improve the knowledge-based economy. (Innovation Union Scoreboard 2014)

The second dimension is the “Open, excellent and attractive research systems” which measures the scientific base and its competitiveness internationally. In the countries where the performance in this dimension is high international partnerships and collaboration is open and the researchers have vast international networks. Also their quality of research output is high. (Innovation Union Scoreboard 2014)

The “Finance and Support” dimension indicates the amount of finance available for innovation projects in the country. In the countries that perform the best in this dimension the public sector is able to perform a great deal of R&D activities. Also the private firms are able to develop new technologies through available risk capital. (Innovation Union Scoreboard 2014)

Firm activities measure the innovation performance in the firm level. The first dimension is “Firm Investments” which means the investments that the firm does to create innovation. If the country is doing well in this dimension it means that the companies are investing a lot to innovation activities that include both science-based R&D activities and non-R&D activities such as equipment and machinery. (Innovation Union Scoreboard 2014)

“Linkages and Entrepreneurship” defines the innovation competences in SMEs that innovate in-house and their collaboration efforts. In the best performance groups the SMEs have strong collaboration with public sector organizations and other companies which enables them to connect their in-house and joint innovation activities. In these countries the co-publication activities are high, which means that the research systems aim to meet company demands. (Innovation Union Scoreboard 2014)

The last dimension “Intellectual Assets” tells about the country’s different methods of intellectual property rights in the innovation process. The countries performing best in this dimension are protecting their new ideas and innovations

very well. New technologies, goods and services can be protected by using patents, trademarks or designs. (Innovation Union Scoreboard 2014)

The last main indicator is the *outputs*, which determines the different effects of the innovation activities of the firms. “Innovators” determines the number of firms that have presented innovation to the markets or within their organization. In the countries where the performance in this dimension is high the innovation strategy is common for firms in order to meet customers’ needs and have the competitive edge in the markets. The innovation activities provide more employment opportunities. The dimension “Economic Effects” determines the economic success in innovation. (Innovation Union Scoreboard 2014)

4.1.3 Overall performance

IUS has been conducted since the year 2006 and during this time all the member states have been improving their performance in innovation. The countries that are performing the best according to the survey are the ones that are performing the best in all the dimensions. These countries have very balanced national research and innovation systems. The innovation leaders as well as the innovation followers are performing steadily and have very little variations in their innovation performance. (Innovation Union Scoreboard 2014)

The differences in performance are smallest in the “Human Resources” dimension which means that there is a lot of high-skilled workforce available across the member states. On the other hand, the biggest difference is in Open, Excellent and Attractive Research Systems as well as in Linkages & Entrepreneurship. This shows that the member states are not similarly developed by the means of research systems. In order to achieve a high level of innovation performance the member states need to have a balanced innovation system in order to perform well in all the dimensions. (Innovation Union Scoreboard 2014; cf. McCann & Ortega-Argilés 2014)

4.2 The State of European Innovation

4.2.1 Challenges

The challenges that European Union member states have faced are more or less related to the financial crisis and the consequences of that. The member states have not yet recovered entirely from the crisis and there can be seen, for example, high unemployment rates all over Europe due to this. There are many differences between the member states and as some countries are doing quite well already, the other ones are still lagging behind. (The State of European Innovation 2014)

Productivity growth has been very moderate lately in the EU. The productivity growth should be faster in order to increase the per capita income as well as standards of living. Especially when compared to the US, European countries are not performing well. Their productivity levels are significantly lower than in the US and labor productivity growth is highly uneven between member states. It is important for the EU to see its full potential and competitiveness in order to face the challenges through productivity growth. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

Another challenge in the EU is the high debt burdens. From the beginning of financial crisis the member states' debt to GDB ratio has increased extensively. The countries are less capable of paying back their debts that the governments have taken in order to save the economy. The so called austerity policy has been used in order to keep the debt in control and pay it back. But by cutting down the resources that contribute to public investments in infrastructure and education it is more seemingly going to injure the productivity levels. Thus, the EU should find a fiscal policy that will increase economic growth without harming the productivity growth. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

The demographics in the EU are showing some challenges as the European population is ageing with accelerating pace. The pension systems that was accepted widely before financial crisis are becoming untenable. This will result in

changes in pensions, which again means less purchasing power for the aging population. The other challenge that the EU will face due to aging population is the increasing need for health care. In order to overcome these challenges the countries need to increase taxes or reduce the spending in the other areas. To compensate the missing workforce from the aging population the countries should increase their labor productivity. One way of doing so is to rise retirement age or to permit more immigrants to be used as a workforce. (The State of European Innovation 2014; see also Bargheh et al. 2009; McCann & Ortega-Argilés 2014)

European Union member states' companies and individuals are uncertain to consume and invest, which results in unsteady credit growth. The banks are also more willing to lend to the domestic market rather than to outside the national borders. This makes it challenging for European SMEs to get funding, especially in those countries where the impact of the financial crisis is more serious. When these companies are not getting any funding innovation will also suffer because many of European firms are relying on bank money. (The State of European Innovation 2014)

4.2.2 Areas of Improvement

European Union needs to improve in some areas to be able to promote innovation and increase the economic growth. Innovation is one very important part of the recovery from the financial crisis, since firms and countries have a clear competitiveness to have an innovative environment. The innovation processes and strategies need to be improved and attitudes need to be adjusted. (The State of European Innovation 2014; see also Martins & Terblanche 2003; Steiber & Anlänge 2014)

Private investment in innovations is not seen that strong in Europe. It would be essential for firms to get private investors to fund their innovation programs, especially at times like these when the governments are in high debt and not willing to support innovative firms. Additionally, Europeans do not think that governments and public authorities target a sufficient amount of their budget to

support innovation projects. The European people do not trust that trade regulations and agreements are supporting innovation nor are the governments or public authorities. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

Collaboration with customers, governments and other third parties is essential for a company that wants to be innovative. The companies that have been collaborating are showing results of revenue and profit increases from these activities. European firms, however, are showing lack of collaboration. They want to innovate within the business and teams rather than through sharing information, talents and resources across the globe. These firms should consider the possibility of foreign investment and not promote domestic innovators because investments domestically are restricted. (The State of European Innovation 2014)

Talent management in some European countries is not that high. The executives in European firms are not as committed attracting and maintaining talents than in other parts of the world. Also, adopting new and emerging technologies is not seen as very important in a European firm. However, these firms should be promoting creative behavior and creating an innovative environment. (The State of European Innovation 201; see also McCann & Ortega-Argilés 2014; Refaat & Alsanad 2013)

4.2.3 Suggestions

There are many challenges and areas of improvement in innovation in the EU, which mainly have arisen from financial crisis or poor execution of innovation strategies. Also the mindset in different companies and countries have created some of the pitfalls. The European Union and other institutions have suggested different kinds of solutions overcoming the challenges and surviving the financial crisis. To become more innovative in the future companies, countries and individuals need to make some changes. (The State of European Innovation 2014)

Governments should create stable and reliable long-term objectives and focus on making the country more innovative. In order to encourage entrepreneurship and

attract investments this framework and the set strategy should be such that supports research, developing technology and innovation. Governments should have preconditions that help reach their objectives and they need to leave things related to R&D to industry and academia. Also, government investments should focus on specific areas where European firms already have competitive edge and which are important for the future as well. These could be areas such as renewables or healthcare. In the long-term objectives collaboration should be emphasized. (The State of European Innovation 2014; see also Refaat & Alsanad 2013)

One of the biggest competences for Europe is its diversity, which should be utilized to greater extent in order to promote innovation better. By making Europe a single market for innovation the benefits from external economies and localized co-operation can be gained. An integration of cultures and institutions would reduce bureaucracy, promote collaboration outside the borders and result in more mobile talent and skill sharing. (The State of European Innovation 2014)

Europeans are very aware of the risk such as bankruptcy or losing property and, thus might lack the confidence to become an entrepreneur. These cultural barriers should be broken in order to create an environment for entrepreneurship. Governmental policies should be changed so that entrepreneurship would be introduced already in basic education level which would give young people knowledge, expertise, and skills. Also the attitudes should be changed so that next generations could promote innovation instead. This can be done through media, for example, or by providing good working experiences. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

Private investments are the ones that contribute the most to R&D activities but in Europe, these investments are not very high. The government should support an ecosystem that strives in excellence of technology, entrepreneurship and innovation. This means training of scientific and technological talent, funding schemes to stimulate the pursuit of new ideas and concepts or new businesses in selected areas, and to robust legal framework to protect investments and

intellectual property. By doing this the governments provide an engaging framework and environment for private investors to invest in R&D and product development. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

4.2.4 Investments

The public investments from the governments are very essential in order for Europe to become more competitive. Universities and research organizations have the knowhow how to gain knowledge and conduct research, mainly they are just lacking the funding which should come from the governments. This would also benefit the European governments with fundamental research that they need. Also the governments could be able to direct their funds to the R&D projects that they see viable in the future. Tax incentives are also a good way of attracting companies to have their R&D activities in a specific region or country. (The State of European Innovation 2014; see also Frederick 2014; cf. Artz et al. 2010)

The governments should, in addition, invest in partnerships between public and private entities. These kind of partnerships would encourage entrepreneurs to share their knowledge, skills and resources with universities and other public institutions. This would generate economic growth and a great platform for innovation and creativity. When both are dependent on each other in some ways it makes them work more efficiently towards joint objectives. (The State of European Innovation 2014)

Through the new EU directive for public procurement the countries and companies are able to be more involved in the procurement process of the European governments. This way the governments will also create demand for the companies. When everyone is given the opportunity to be involved in the public procurement it creates more competition and, thus, innovation in the markets. (The State of European Innovation 2014; see also McCann & Ortega-Argilés 2014)

Horizon 2020 is an EU research and innovation program that gives funding to innovative projects. Within a seven-year timeframe (2014 to 2020) the Innovation Union will have almost 80 billion euros for funding. This program aims to attract more innovativeness and breakthroughs in the different markets and at the same time increase Europe's competitiveness. The program aims to encourage public and private sectors to work together and remove barriers to produce more innovations. The program is open to everyone and the aim is to reduce bureaucracy in order to deliver innovations quickly. (<http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>)

5 EMPIRICAL ANALYSIS AND FINDINGS

In this chapter there the empirical findings are presented and analyzed. First the research methodology used in this research will be presented. This contains the aim of the research and the research methods used to gather answers. Also, the sample size and limitations of the study will be discussed. After this, the reliability and validity of the research will be discussed. Finally, the results of the research will be presented and discussed in subchapters. There will be comparison tables of the companies involved in the study, which will give a clearer picture about the results discussed in this chapter.

5.1 Research Methodology

The aim of this research was to identify the characteristics of an innovative company and define the activities involved in such a company. Comparison between different types of innovative companies show the differences and similarities in innovation activities and characteristics. The objective is to discover the motivation for innovation and how innovation is taken into consideration in the everyday activities of companies.

The research method used in this thesis is mixed method. A mixed research method combines both qualitative and quantitative research methods by giving more comprehensive picture of the results. (Dunning, Williams, Abonyi & Crooks 2006) The questionnaire has mainly open-ended and descriptive questions which give the respondents an opportunity to express thoughts in their own words. This will give more flexibility for the analysis of the results. A questionnaire is sent by email in both English and Finnish.

Two companies were chosen and asked in advance to participate in the survey. Additionally twelve randomly chosen innovative companies were sent the survey but only one answer was received. First of all it was challenging to find any contact information for these companies and second of all the time was very limited. These might be the reasons for only receiving few answers. The

respondents were responsible for innovation and related activities in the company. The companies chosen for this research were companies operating in Finland with innovation activities.

5.2 Reliability and Validity

Reliability of a research means how well the research could be repeated by other researchers. It means that they should be able to make similar findings using similar research techniques. Validity refers to generalization of the research. If the results of research can be generalized to a wider theory it can be seen as valid. (Riege 2003)

The questions in this study were easy to understand and clear to answer to. Still, when there are many open questions the respondent may understand the question differently than intended or differently than the other respondents, which causes different meanings in the answers. This questionnaire was sent both in Finnish and in English and answers in both languages were received. There can be some translation errors from Finnish to English which could change the meaning of the answer and effect the interpretation of the results.

The validity of this research is very low since only three responses were received. This means that the results cannot be generalized. Also, because two of the companies were selected the randomness of this study is not very high.

5.3 Results

The questionnaire is divided into three different sections; Basic, R&D activities and Innovation in the company. In the Basic section the respondent was asked to specify the background information about the company, types of innovation as well as motivation for innovation in the company. The R&D activities section focuses on gathering information about the innovation in the company and related activities. Section Innovation in the company aims to identify if the characteristics of an innovative company can be seen and in what ways innovation is encouraged.

5.3.1 Respondents

The first company included in the study is Orion Pharma, which is operating in the pharmacy industry and which employs over 3000 employees. This makes it a large innovative company. Orion is a Finnish company that among other things develops pharmaceutical products as well as manufactures and markets drugs. The respondent of this questionnaire is a 48-year-old female who has been working in the pharmacy industry for 20 years and at Orion for ten years. She is currently working in the R&D department as a Vice President of Development.

The second company is FakeFish, which is operating in the gaming and game development industry. This company has less than 100 employees and, thus, is a small innovative company. FakeFish was founded in 2014 so it has only been operating for almost a year now. The respondent is a 25-year-old male and is the CEO of the company. The department was not been specified but since the company is so small the whole staff is involved in development and innovation in the company. The respondent has been working in this type of industry as well as in this company for one year now.

The third company is Dentsu Aegis Network Finland (called Dentsu from here) which is a marketing consulting company that has 101 to 250 employees. This company is a small innovative company. The respondent for the questionnaire is a 42-year-old female that has been working in this industry for 14 years and at Dentsu for six years. She is working in Insight and Analytics department as the team leader of Insights.

5.3.2 Type of Innovation

During this year Orion has developed both process and product innovations. The example of innovation that the respondent has been involved in during her time at Orion is related to drug development. They have new molecule ideas which aim to get new medications for unmet needs. Drug development from an idea to a marketed product takes 12-15 years, which means that the success of the innovations is seen only after this period. Until the innovation is ready, each step

in the development process is considered as a success. The respondent has also been involved in innovations related to company culture and drug development processes.

FakeFish has been developing only product innovations during this year. The respondent says that in the gaming industry creative solutions must be made when planning new games. It is very challenging to find new technologies and game mechanics to make games and this is why the best outcome is achieved when already existing mechanics and technologies are used, either directly or slightly modified. In games innovative solutions need to be made in order to create backstory, plot and the game itself. Currently FakeFish is developing a mobile adventure roleplaying game called Northbound which theme is Kalevala and Nordic mythologies. There are no games about Kalevala yet which makes their idea very unique and innovative. In this game FakeFish is aiming at utilizing the advantages of a touch screen as innovatively as possible.

During this year Dentsu has developed both process and product innovations. As an example of innovation the respondent gives automation of digital marketing and dashboards that are automatically updating information tracking views. These have been developed during the time that the respondent has been working in the company.

Because Dentsu is mainly providing services, its focus is on process innovations and developing them through e.g. automation of digital marketing. On the other hand, Orion and FakeFish's innovations are focused on different product innovations such as drugs and games. Although Orion is also developing its processes, they are mainly focused on improving the company internally, such as company culture. This can be seen encouraging innovation within the company and not necessarily as an innovation itself. It can be seen that the motivation for innovation is dependent on the type of innovations the company is developing in addition to services and products it is providing. A comparison can be seen in Table 1.

5.3.3 Motivation for Innovation

At Orion the most important motivation for innovation is to offer products and processes that meet customers' needs and wants. The second important motivation is to improve the quality of life and after that to become more productive. They see continuous improvement as the fourth important area of motivation in their company. The fifth important motivation area is to have bigger market share and the least important one is to reduce costs. Still another motivation they have for innovation is to make the working environment pleasant so that people can enjoy working and that way improve their productivity.

FakeFish perceives offering products and processes that meet customers' needs and wants as their most important motivation reason for innovation. The second important motivation reason for innovation is to gain a bigger market share and the third important reason is continuous improvement. At FakeFish the fourth important motivation reason for innovation is to become more productive. The fifth important motivation reason is improving the quality of life and the least important reason is to reduce costs. FakeFish is aiming at keeping the atmosphere relaxed and free in order to motivate the employees to share their opinions and thus invent new ideas for their games.

At Dentsu the most important motivation reason for innovation is seen as gaining bigger market share. The second important reason is to offer products and processes that meet customers' needs and wants followed by becoming more productive. The fourth important motivation reason for innovation is continuous improvement. The fifth one is to reduce costs and the least important one is to improve the quality of life. Another motivation for innovation at Dentsu is the digitalization of consumers and marketing, which is a part of discontinuous innovation. Dentsu needs to adapt its operations and processes to the changing environment of market.

Both of the small companies have as one of their most important motivators for innovation is the aim of gaining bigger market share. This can be explained by the

fact that the companies are striving to become bigger and more international whereas Orion has already gained a big market share in its own industry and can thus focus on other aspects such as improving quality of life. In this case the size of the company is also one of the factors that influences the motivators for innovation in the company, although improving quality of life at Orion is dependent on its pharmaceutical products offered as well. Dentsu and FakeFish saw this, improving the quality of life, as the least important motivator for innovation, which is understandable because of the types of products they are offering. In Table 1 can be seen the motivation for innovation in the companies. They are in the order from the most important motivation for innovation to the least motivation for innovation.

Table 1. Type of Innovations and Motivation for Innovation.

Orion	FakeFish	Dentsu
<ul style="list-style-type: none"> • FOCUS: • Product innovations • MOTIVATION FOR INNOVATION: • Offer products that meet customers' needs and wants • Improve quality of life • Become more productive • Continuous improvement • Bigger market share • Reduce costs 	<ul style="list-style-type: none"> • FOCUS: • Product innovations • MOTIVATION FOR INNOVATION: • Offer products that meet customers' needs and wants • Bigger market share • Continuous improvement • Become more productive • Improve quality of life • Reduce costs 	<ul style="list-style-type: none"> • FOCUS: • Process innovations • MOTIVATION FOR INNOVATION: • Bigger market share • Offer products that meet customers' needs and wants • Become more productive • Continuous improvement • Reduce costs • Improve quality of life

5.3.4 Innovation Process

Generally Orion is getting new ideas for innovation from the customers and often from the management, employees, co-operation partners, selective research and development and environmental scanning. Once Orion has received an idea for innovation it is evaluated by experts. If it is feasible, it is tested or piloted and then implemented. Process related ideas are implemented more quickly since the

product related ideas require years of studies and research. This is done in steps which means that a development has to go through all the phases of drug development until marketing authorization and launch. Orion has contest rewards and bonuses as an incentive program for innovation.

At FakeFish new ideas for innovation come from the management and often from the employees in the company. Generally the new ideas come from customer feedback and environmental scanning. They are rarely received from selective research and development or from co-operation partners. Once a new idea surfaces and FakeFish starts to develop a new game they arrange few brainstorming sessions where everyone can speak freely and the most potential ideas are gathered. The development of the best ideas is started and at the same time the market value and feasibility are examined. Competitor analysis is also made. Once the most potential idea has been chosen the functionality of innovations is tested in the game. FakeFish does not have any incentive programs for innovation.

FakeFish is starting the testing of Northbound in the fall 2015 and then starting to gather feedback about the game. Based on these results they are able to make small fixes to the game before the actual publication. Once the game has been published they intend to gather customer feedback via application stores, from the communities on the internet, by utilizing social media and via direct email feedback. Because Northbound will be published episode by episode FakeFish will be able to take the feedback into consideration between the episodes. In this way they are able to make possible corrections and fixes in order to offer a gaming experience that will please the customers.

At Dentsu generally the ideas for innovation are received from management, customer feedback, co-operation partners and selective research and development. The ideas are received often from employees and through environmental scanning. Once the idea for innovation has been received the innovation is developed on expert groups and after this the staff is trained and then the

production for customers is started. Dentsu does not have any incentive programs for innovation.

All the companies that answered the questionnaire describe their innovation process and they all have the four steps that are described in the theoretical part. In the search step the companies receive the idea for innovation from different people within or from outside of the company. Then, in the selection step the companies test and discuss in the company or with experts whether or not the idea can be implemented. They select the idea that is developed further and in the implementation step the companies test the feasibility as well as studying and researching the innovation. It is then developed to meet customers' needs and wants by the help of customer feedback. In the last step, capturing, the companies receive a lot of feedback and improve the innovation more. In the Table 2 this innovation process in all the researched companies is presented.

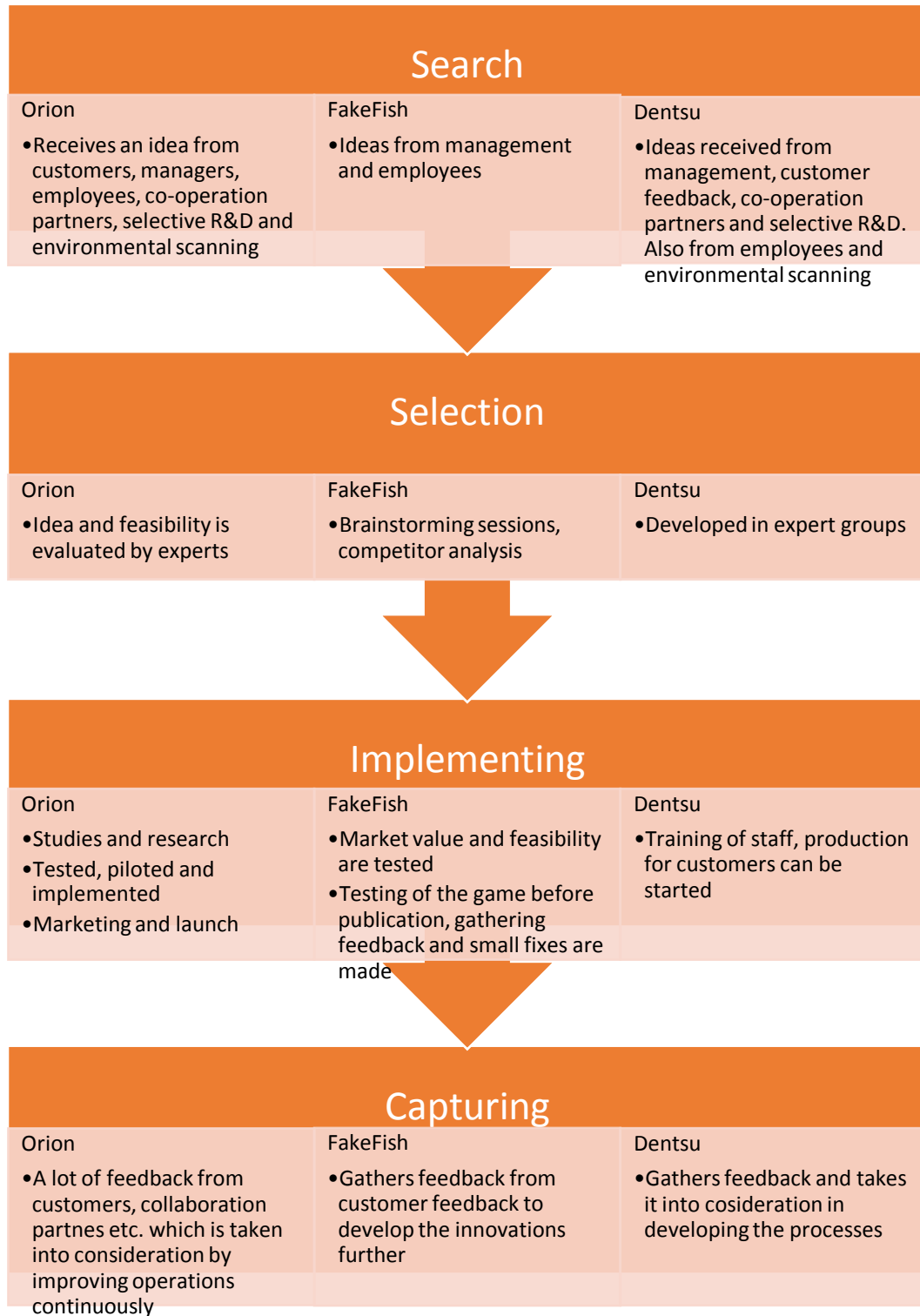
5.3.5 R&D and Innovation

Orion spent 100 000 000 € on innovation last year and their innovation activities are funded by public investors. The institutes that are funding their R&D activities are international investors and Finnish households. They have thousands of investors and owners altogether. Orion has its own R&D department with 301 to 1000 employees and they are also doing joint R&D with other companies.

Orion is outsourcing its innovation activities and acquiring technology or information from universities, consulting agencies, research institutes and contract research organizations which are companies that are specialized to drug development operations. Orion uses the external sources to help in almost all of their R&D tasks. Mostly they are using outsourcing to get sufficient human resources to carry out development related activities, but also technologies that they do not have in the house. The external sources may help with any clinical or non-clinical study related tasks that include e.g. data monitoring, clinical conduct of the study in the hospitals, data collection, statistical analyses and reporting. In

addition they use external sources in non-clinical regulatory studies and formulation development, just to name a few.

Table 2. Innovation Process



Orion is constantly protecting its intellectual property rights. Patent, licensing, design, trademark and other things related to products have been protected this year. Innovation in the company is encouraged by investing considerably in R&D each year.

FakeFish did not spend any money on their innovation activities last year and their innovation activities are funded with their own capital. Their R&D activities are funded by Starttiraha, which is a personal money given by the ELY center for the founders of the company. Additionally the scriptwriters' salaries are paid with the support received from the Kalevala Society Foundation. FakeFish does not have its own R&D department neither do they outsource any of their activities. FakeFish does joint R&D with other companies but has never protected its intellectual property rights.

Dentsu is not able to say how much they spent on innovation last year. This company funds its innovation activities with its own capital which means that they do not have any other institutions that fund their innovation activities. Dentsu has its own R&D department which has fewer than 30 employees. They do not do any joint R&D with other companies. Dentsu is outsourcing its innovation activities. The institutions that it is using for acquiring technology are consulting agencies and research institutes. The external sources are used for data acquisition, research platforms and system consulting. Dentsu does not protect its intellectual property rights in any way. Patents, licensing, design and trademark have never been used for protecting its work.

The size of the company can be seen in the R&D activities of the companies. Orion has its own R&D department with a lot of employees compared to Dentsu's R&D department. FakeFish does not even have its own R&D department and develops its innovations in-house. They are getting public funding for their innovation activities similar to many other start-up companies in Finland. Orion has many investors and owners and, thus, is able to spend a great amount of money on R&D activities. Dentsu is funding its innovation activities with its own capital, which is also a characteristic of a small innovative company.

Orion and Dentsu are both outsourcing some of their innovation activities but Dentsu is focusing on acquiring more information and data than Orion. Orion acquires and outsources almost everything related to R&D activities. This is a characteristic of a bigger company because they can afford to have their own R&D department as well as acquire both technology and information from external sources.

Also it can be seen that Orion is constantly protecting its intellectual rights whereas FakeFish and Dentsu do not see the need for that. First reason can be that Orion has more capital and therefore is able to finance patents, trademarks and so on. This is dependent on the size of the company. On the other hand, FakeFish might not have the need to protect its intellectual property rights on the early stages of its business. Additionally, the type of product can be dependent on whether the company needs to protect these rights or not. Orion is developing such products and radical innovations that it has the need to protect different formulas and other from the competitors. Dentsu is providing mostly services which means that they do not have the need for protecting intellectual property rights. A comparison of R&D activities and outsourcing in the companies is illustrated in Table 3.

5.3.6 Characteristics of an Innovative Company

Orion strongly agrees with the following statements; Internal information sharing and job rotation are important for innovation; External information sharing through seminars, conferences and workshops is important for innovation; Close relationship with suppliers is essential for delivering the best outcome possible; Having discussions with the end-user and taking the feedback into consideration gives added value for the company; Clear vision and strategy for innovation create a working environment that encourages innovation; Knowing employees' strengths and having the right people in right positions makes innovation more effective; and Customer focus is one of the key things in our innovation strategy.

Table 3. R&D Activities and Acquisition

	Orion	FakeFish	Dentsu
R&D Department	Yes	No	Yes
Size of R&D Department	301-1000 employees	-	>30 Employees
Funding of R&D Activities	Own capital, investors, many owners	Public support (Starttiraha)	Own capital
Outsourcing of R&D Activities	Yes (almost all the R&D related activities)	No	Yes
Acquisition	Technology, machinery, information	No	Information
IP Rights	Patent, licensing, design, trademark	No	No

FakeFish agrees with a statement “Clear vision and strategy for innovation create a working environment that encourages innovation” and strongly disagrees with the statement “Close relationships with suppliers are essential for delivering the best outcomes possible”. The company strongly agrees with the statements; Internal information sharing and job rotation are important for innovation; External information sharing through seminars, conferences and workshops is important for innovation; Having discussion with the end-user and taking the feedback into consideration gives added value for the company; Knowing employees’ strengths and having the right people in right positions makes

innovation more effective; and Customer focus is one of the key things in our innovation strategy.

Dentsu neither agrees nor disagrees with a statement; Close relationship with suppliers is essential for delivering the best outcome possible. The company strongly agrees with the statements; Internal information sharing and job rotation are important for innovation; External information sharing through seminars, conferences and workshops is important for innovation; Having discussions with the end-user and taking the feedback into consideration gives added value for the company; Clear vision and strategy for innovation create a working environment that encourages innovation; Knowing employees' strengths and having the right people in right positions makes innovation more effective; and Customer focus is one of the key things in our innovation strategy.

All the companies agree or strongly agree with the statements related to the characteristics of an innovative company. Only statement that was strongly disagreed was "Close relationship with suppliers is essential for delivering the best outcome possible" by FakeFish. Also, Dentsu did neither agree nor disagree with this statement. This can be explained by the fact that FakeFish or Dentsu do not have any suppliers so these companies do not have any relationship with them, thus seeing this not that important factor. Nevertheless, it can be clearly seen that regardless of the type of product, service or industry, the companies fulfill characteristics of an innovative company. The companies' answers for statements regarding characteristics of an innovative company are illustrated in Table 4.

5.3.7 Collaboration, Networking, Information Sharing

Orion has internal training for staff every week to encourage innovation. They have seminars and workshops for external people every month. Additionally, job rotation and conferences are organized yearly. Orion is collaborating with universities, research institutes, and experts from other types of industries, competitors, service providers, organizations, hospitals, clinics and other pharma companies. They have co-development with other pharma industries as well as

Table 4. Characteristics of an Innovative Company

	Orion	FakeFish	Dentsu
Internal information sharing and job rotation are important for innovation	Strongly Agree	Strongly Agree	Strongly Agree
External information sharing through seminars, conferences and workshops is important for innovation	Strongly Agree	Strongly Agree	Strongly Agree
Close relationship with suppliers is essential for delivering the best outcome possible	Strongly Agree	Strongly Disagree	Neither Agree nor Agree
Having discussions with the end-user and taking the feedback into consideration gives added value for the company	Strongly Agree	Strongly Agree	Strongly Agree
Clear vision and strategy for innovation create a working environment that encourages innovation	Strongly Agree	Agree	Strongly Agree
Knowing employees' strengths and having the right people in right positions makes innovation more effective	Strongly Agree	Strongly Agree	Strongly Agree
Customer focus is one of the key things in our innovation strategy	Strongly Agree	Strongly Agree	Strongly Agree

drug discovery with other companies and universities. They also have purchasing services, managing, planning and evaluating drug development together with the collaborators. FakeFish has conferences every year but has never internal training for its staff or workshops for external people to encourage innovation. The company has seminars and job rotation more seldom than every two years. FakeFish is collaborating with Turku University of Applied Sciences as well as with various competitors. There is very little direct competition in the Finnish

gaming industry and, thus, Finnish gaming companies are helping one another. Most of the Finnish gaming companies are aiming at the international market, which means that the games are not directly competing in the same market. FakeFish has received great deal of valuable feedback and tips for game development and business from companies that have been in the industry for a longer period of time. They have increased their network in the Finnish gaming community and through these connections they feel that they can achieve something good for their company. FakeFish will co-operate with Turku University of Applied Sciences by carrying out customer projects offered for Turku UAS. Additionally, they have offered practical training posts for many Turku UAS' students.

Innovation is encouraged at Dentsu through international collaboration and information sharing. Dentsu has every month an internal training session for its staff. They hold seminars and conferences yearly and job rotation more seldom than every second years. They do not have workshops for external people at all.

All the three companies that responded the survey are sharing information to their staff in different ways. Orion and Dentsu are having internal training sessions for their staff quite often whereas FakeFish is more focused on workshops and seminars. Orion and Dentsu have seminars, conferences and workshops as well in addition to job rotation that is done in every company. Through information sharing the companies ensure that their employees are competent and up-to-date constantly.

Networking and collaboration are vital parts of every respondent company's operations. Especially Orion and FakeFish focus on collaboration with different institutions, which gives them more ideas for innovation from different sources. The innovation is encouraged through these collaborations and partners. Interestingly FakeFish is collaborating with its competitors as well which is seen as an advantage in the company. This is explained by the type of industry they are in. All and all it can be seen that information sharing, collaboration and

networking are essential to each of the companies involved in the survey, which are also essential parts of an innovative company.

5.3.8 Customer focus and Company Culture

Orion collects ideas from everyone in the company using electronic tools. They are often rewarding good ideas and having different campaigns and contests to collect new ideas. Innovation is one of the values in the company and is also often discussed within the company. The respondent feels that the vision of the company is encouraging the employees to innovation. Their mission is to build well-being and in their vision it is mentioned that Orion is an innovative company.

Orion has seminars, conferences and workshops every month. Also, they yearly receive feedback from co-operative partners and doing market research. Every three years a customer satisfaction survey is conducted. In Orion external feedback is discussed regularly within teams and there is a “lesson learned” mentality. The practices are changed if needed which means that they are encouraging continuous improvement in their company. They feel that external as well as internal feedback is extremely important in order to develop the ways of working. The company is continuously encouraging their employees and collaborators to give feedback.

Innovation is encouraged by creating a relaxed and free atmosphere at FakeFish. The respondent feels that their company’s vision is encouraging their employees for innovation. They strongly believe that, Northbound, the game they are developing, has the potential to bring economic growth to their company, which again makes it possible to acquire external money into the company and develop new games in the future. FakeFish conducts a market research every week and every year they hold seminars, conferences and workshops. Also, feedback from co-operative partners and customer satisfaction surveys are collected every year.

At Dentsu, the respondent feels that the vision of the company is encouraging its employees to innovate. Their vision is to be different and better than other service providers. Agile, pioneering, and ambitious are values of the company. Market

research at Dentsu is done every week and seminars, conferences and workshops are held monthly. Feedback from co-operative partners and customer satisfaction surveys are collected annually. Dentsu feels that feedback from the customers is extremely important and is taken into consideration with high importance. The company is has collaboration with experts from other types of industries and buys some services from other consulting and expert companies.

It can be seen that all of the companies have a strong company culture that has a vision that encourages innovation. Strong customer focus in their operations can also be seen. They are taking their external as well as their internal customers' feedback into consideration. Continuous improvement in their activities is one of the essential part of their innovation strategy. They are receiving feedback through market research and customer satisfaction surveys which give them information about products and processes that should be improved.

6 CONCLUSIONS

6.1 Analysis

Different aspects of innovation within the company are not only dependent on the size of the company but also on the type of industry and the products offered. Of course the focus of innovation, whether it's a product innovation or process innovation, depends on the type of product or service offered in the company. In the companies that are offering, selling or producing products, the focus is on the product innovations. On the other hand, if the company offers mainly services, its focus is on process innovations.

It can also be seen that in companies where they mainly offer products, they also have process innovations but these are mostly related to processes inside the company. This can improve the innovativeness but is not necessarily a process innovation itself. Also, companies are developing their processes and products continuously, which means that they have incremental innovations all the time. Radical innovations are rarer but can be seen time to time, especially in the pharmaceutical industry, which is developing new drugs and formulas constantly.

Motivation for innovation and different aspects of innovation are more dependent on the type of industry and the products offered in the company. Although the companies saw most of the motivations for innovation as important as the other, some of the motivations were ranked as the most important whereas the other company saw this as the least important. "Improving quality of life" was seen as the most important motivation for innovation by Orion that offers pharmaceutical products. FakeFish and Dentsu saw this as the least important motivation for innovation because they are offering games and marketing consulting services, thus, not seeing improving anyone's quality of life as that important motivation.

On the other hand, also the size of the company can affect the motivation for innovation. In Dentsu and FakeFish "Gaining bigger market share" was seen as one of the most important motivations for innovation. These both companies are

small innovative companies and are still trying to become bigger. When compared to Orion, that saw this as one of the least important motivation for innovation, who already has a big market share in their type of industry and has its focus on other motivation reasons for innovation.

In innovation and related activities the size of the company can clearly be seen. The amount of resources in the company has an effect on having a R&D department of their own, the size of it as well as acquisition of external technology and information. Bigger companies were able to have their own R&D department in addition to outsourcing their innovation activities. In comparison, the smaller companies could have their own R&D department but it was considerably smaller or it did not exist at all. Also, smaller companies outsourced their activities to some extent but it was more focused on acquisition of information rather than technology.

Innovation process in the companies follows the steps identified in the theoretical part. The companies first start with the search for new innovation. The idea can come from outside or inside the company, and in some cases, the determinant was a discontinuous innovation, which forces the company to adapt in a new situation. Then the company selects and implements the innovation through studies and research. The feasibility is tested as well as the market value. All the companies are executing the capturing phase very well by receiving a lot of feedback from the customers and partners in order to improve the operations. It can be seen that the innovation process of a product takes more time than the process innovation.

In all the companies the characteristics of an innovative company are extremely strong. Even though they are different sizes, from different industries and offering different products, they all have the same attributes and focus within the company. These companies are collaborating with several external institutions and people. They are also recognizing their employees' core competences as well as keeping them up to date through information sharing and training. The companies are networking and sharing information with competitors, experts and other people in seminars, conferences and workshops.

The companies have also a strong company culture that encourages innovation and makes sure that their employees are aware of the vision and innovation strategy in the company. The customer focus is one of essential parts in their company. Feedback is extremely important for them and the operations are developed continuously. Customers' needs and want are taken into consideration in everyday activities of the companies.

6.2 Suggestions for the companies

Although all the companies are collaborating with other companies and institutions it would be essential to do so even more. Also, to share ideas with external people from other industries would give new viewpoints for innovation. This would increase the amount of innovation in the companies.

In addition, especially the smaller companies should have clearer innovation strategies. This way they would be able to allocate the resources where they are needed and innovation would be more efficient and effective. This would encourage more to innovation because then everyone would know what should be done.

4P model is not used in the companies and it would be a good way to map the innovations. Thus, the companies would be able to develop such innovations that are not developed yet in their company, or in the market.

6.3 Future Research

One of the topics for future research would be to see how innovation is perceived from the employees' point of view. By focusing on only employees the innovation within the company could be seen in more detail and from many aspects and opinions. This could provide a more thorough understanding of how innovation is really encouraged in companies.

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APPENDICES

Appendix 1 Innovative Companies Questionnaire (English version)

Innovative Companies

Dear Respondent,

I am a last year student in Vaasa University of Applied Sciences and doing my thesis about Innovative Companies. My goal is to find out how these companies are dealing with R&D activities and how innovation can be seen within their company. Comparison between SMEs and large international companies is also made.

Please take some time to answer my survey. I really appreciate your effort.

Thank you!

Basic

Company name? Or do you want to keep it totally anonymous? *

Background of the respondent *

Age	<input type="text"/>
Gender	<input type="text"/>
Department	<input type="text"/>
Position in the department	<input type="text"/>
Work years in this industry	<input type="text"/>
Work years in this company	<input type="text"/>

Number of employees *

> 100

101-250

251-500

501-1000

1001-1500

1501-3000

< 3001

Type of industry *

Financial Services

IT-Technology

Pharmacy Industry

Construction

Chemical Industry

Manufacturing

Other

Which types of innovation has your company developed mostly during this year? *

Process innovation

Product innovation

Both

Other, what?

Give some examples of innovations you have had in your company during the time you have worked there *

What is the motivation to do innovations in your company? (1=the most important, 5=the least important) *

⬆ Bigger market share

⬆ Reduce costs

⬆ Become more productive

⬆ To offer products and processes that meet customers needs and wants

⬆ To improve quality of life

⬆ Continuous improvement

Are there some other motivation for innovation in your company?

R&D activities

How much did your company spend in innovation activities last year? *

€

How are your company's innovation activities funded? *

Public investors

Private investors

Own capital

Other, what?

Please specify institutes that are funding your R&D activities. *

Does your company have their own R&D department? *

- Yes
- No

If yes, how large is your R&D department? (employees)

- < 30
- 31-100
- 101-300
- 301-1000
- > 1001

Does your company outsource the R&D activities? *

- Yes
- No

If yes, please specify which institutes the company is using to acquire technology or information

- Universities
- Consulting agencies
- Research institutes
- Other, what?

What kind of R&D activities does your company use the external sources to? (e.g. acquisition of information or technology)

Does your company do joint R&D with some other company? *

- Yes
- No

How and when has your company protected its Intellectual Property Rights? *

	This year	Last year	2 Years ago	3 Years ago	Over 3 Years ago	Never
Patent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trademark	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, what? <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

↓ +1

Innovation in the company

How is Innovation encouraged in your company? *

Do you feel that your company's vision encourages the employees to innovation? *

- Yes
- No

Please describe your answer to the previous question. *

Do you agree with the following statements concerning innovation in the company? *

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Internal information sharing and job rotation are important for innovation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
External information sharing through seminars, conferences and workshops is important for innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close relationship with suppliers is essential for delivering the best outcome possible	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having discussion with the end-user and taking the feedback into consideration gives added value for the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear vision and strategy for innovation create a working environment that encourages innovation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing employees' strengths and having right people in right positions makes innovation more effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer focus is one of the key things in our innovation strategy?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often does your company have the following events to encourage innovation? *

	Weekly	Monthly	Yearly	Every second year	More seldom	Never
Internal training for staff	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workshops for external people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Job rotation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

From where do new ideas for innovation come to your company? *

	Never	Rarely	Generally	Often	Always
By management	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From customer feedback	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By co-operation partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From selective research and development	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By environmental scanning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, what?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

↓ +1

Please describe the Innovation Process in your company once the idea has been received. *

What type of incentive programs for innovation you have in your company? *

Premium pay

Salary increase

Coupons

Extension of promotion

Public awards

We do not have any incentive program for innovation

Other, what?

How often is your company doing? *

	Weekly	Monthly	Yearly	Every three years	Never
Market research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer satisfaction survey	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feedback from cooperative partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars, conferences, workshops etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How external feedback (e.g. from customers, partners and other external sources) is taken into consideration in your company? *

Which of the following is your company doing collaboration with? *

Universities

Research Institutes

Experts from another type of industry

Competitors

Other, what?

Please describe types of collaboration your company is doing with these institutes. *

Appendix 2 Innovatiiviset yritykset Questionnaire (Finnish version)

Innovatiiviset Yritykset

Hyvä vastaaja,

Olen viimeisen vuoden opiskelija Vaasan ammattikorkeakoulussa ja teen opinnäytetyötäni innovatiivisista yrityksistä. Tavoitteeni on tutkia millaista tutkimus- ja kehittämistoimintaa näillä yrityksillä on sekä miten innovaatio näkyy teollisissa yrityksissä. Tarkoitukseni on tehdä vertailu pk-yritysten ja isojen kansainvälisten yritysten välillä.

Oisin kiitollinen, jos voit käyttää vähän aikaa vastaamalla tähän kyselyyn.

Kiitos paljon avustasi!

Perustietoja

Yrityksen nimi? Val haluatko yrityksen pysyvän täysin tuntemattomana? *

Taustatietoja vastaajasta *

Ikä	<input type="text"/>
Sukupuoli	<input type="text"/>
Yksikkö	<input type="text"/>
Asema yksikössä	<input type="text"/>
Työvuodet tällä teollisuudenalalla	<input type="text"/>
Työvuodet tässä yrityksessä	<input type="text"/>

Henkilöstön määrä *

<input checked="" type="radio"/> > 100
<input type="radio"/> 101-250
<input checked="" type="radio"/> 251-500
<input type="radio"/> 501-1000
<input checked="" type="radio"/> 1001-1500
<input type="radio"/> 1501-3000
<input checked="" type="radio"/> < 3001

Teollisuudenala *

<input checked="" type="radio"/> Talouspalvelut
<input type="radio"/> Tietotekniikka
<input checked="" type="radio"/> Lääketeollisuus
<input type="radio"/> Rakennusala
<input checked="" type="radio"/> Kemia- ja teollisuus
<input type="radio"/> Valmistusteollisuus
<input checked="" type="radio"/> Muu, mikä? <input type="text"/>

Minkälaisia innovaatioita on eniten kehitetty yrityksessänne tämän vuoden aikana? *

Prosessi-innovaatioita

Tuote-innovaatioita

Molempia

Muita, mitä?

Anna joltain esimerkkejä innovaatioista, joita yrityksessänne on ollut siinä aikana, kun olet työskennellyt siellä *

Mikä motivoi tekemään innovaatioita yrityksessänne? (1=Käikkein tärkein, 5=Vähiten tärkein) *

☺ Isompi markkinaosuus

☺ Hintojen alentaminen

☺ Tuotteitaammaksi tuleminen

☺ Tuotteiden ja palvelujen tarjoaminen, jotka kohtaavat asiakkaiden halut ja toiveet

☺ Elämänlaadun parantaminen

☺ Jatkuva kehitys

Mikä muu motivoi innovaatioon yrityksessänne?

Tutkimus- ja kehittämistoiminta

Kuinka paljon yrityksenne käytti rahaa innovaatiotoimintaan viime vuonna? *

€

Miten yrityksenne innovaatiotoiminta on rahoitettu? *

Julkiset sijoittajat

Yksityiset sijoittajat

Oma pääoma

Muu, mikä?

Tarkenna tahoja, jotka rahoittavat yrityksenne tutkimus- ja kehittämistoimintaa. *

Onko yrityksellänne oma tutkimus- ja kehitystoimintayksikkö? *

- kyllä
 ei

Jos kyllä, kuinka iso tutkimus- ja kehittämistoimintayksikkönne on? (Henkilöstö)

- < 30
 31-100
 101-300
 301-1000
 > 1001

Ulkolstaako yrityksenne tutkimus- ja kehittämistoimintoja? *

- kyllä
 ei

Jos kyllä, tarkenna tahoja, joita yrityksenne käyttää teknologian tai tiedon hankintaan

- Yliopistot
 Konsultointiyritys
 Tutkimuslaitos
 Muu, mikä?

Minkälaisin tutkimus- ja kehittämistoimintoihin yrityksenne käyttää ulkoisia tahoja? (esim. tiedon tai teknologian hankinta)

Onko yrityksellänne yhteistä tutkimus- ja kehittämistoimintaa jonkun toisen yrityksen kanssa? *

- kyllä
 ei

Miten ja koska yrityksenne on suojeleut sen immateriaalioikeuksia? *

	Tänä vuonna	Viime vuonna	2 vuotta sitten	3 vuotta sitten	Yli 3 vuotta sitten	Ei koskaan
Patentti	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tavaramerkki	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muotoilu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lisensointi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muu, mikä?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

↓ +1

Innovaatio yrityksessä

Millä tavoin innovaatiota kannustetaan yrityksessänne? *

Tuntuuko sinusta, että yrityksenne visio kannustaa työntekijöitä innovaatioon? *

- kyllä
- ei

Kuvalle vastaustasi edellisessä kysymykseen *

Oletko samaa mieltä seuraavien välttämien kanssa, jotka koskevat Innovaatiota yrityksessänne? *

	Olen täysin samaa mieltä	Olen jonkin verran samaa mieltä	Ei samaa, eikä eri mieltä	Olen jonkin verran eri mieltä	Olen täysin eri mieltä
Sisäinen tiedon jakaminen ja työkierto ovat tärkeitä innovaatiolle	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ulkoisen tiedon jakaminen seminaarien, konferenssien ja työryhmien kautta on tärkeää innovaatiolle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Läheiset suhteet tavarantoimittajien kanssa ovat oleelliset parhaan mahdollisen tuloksen saavuttamiseksi	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keskustelu loppukäyttäjän ja palautteen huomioiminen antaa lisäarvoa yritykselle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selvä visio ja innovaatiostrategia muodostavat työpäristön, jotka kannustavat innovaatioon	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Työntekijöiden vahvuksien löytäminen ja pöytäkirjoilla oikeat ihmiset oikeisiin tehtäviin tekee innovaatiosta tehokkaampaa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asiakasfokus on yksi innovaatiostrategiamme avainsanoista	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Kuinka usein yrityksellänne on seuraavia tapahtumia innovaation kannustamiseksi? *

	Vikottain	Kuukausittain	Vuositain	Joka toinen vuosi	Harvemmin	Ei koskaan
Sisäinen koulutus henkilöstölle	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Konferenssit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminaarit	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Työryhmiä ulkoisille ihmisille	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Työkierto	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mistä tai keneltä uudet ideat innovaatioihin tulevat yrityksessänne? *

	Ei koskaan	Harvoin	Joskus	Usein	Aina
Johdoryhmältä	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Työntekijöiltä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asiakaspalautteista	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yhteistyökumppaneilta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Välikoivasta tutkimus- ja kehittämistoiminnasta	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ympäristökannanottoa kautta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muu, mikä?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

↓ +1

Kuvalle innovaatioprosessia yrityksessänne sen jälkeen kun idea innovaatioon on vastaanotettu. *

Minkälaisia kannustusohjelmia yrityksessänne on innovaatiole? *

Lisäpalkkio

Palkankorotus

Kuponit

Ylennys

Julkiset palkinnot

Yrityksessämme ei ole minkäläisiä kannustusohjelmia innovaatiole

Muu, mikä?

Kuninka usein yrityksenne tekee *

	Vuotokain	Kuukausittain	Vuokittain	Joka kolmas vuosi	ei koskaan
Markkinatutkimusta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asiakastytyvällisyyskyselyitä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palauteita yhteistyökumppaneilta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminaareja, konferensseja, tyryhmiä, jne.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Missä tavoin ulkoinen palaute (esim. asiakailta, kumppaneilta ja muilta ulkoisilta lähteiltä) otetaan huomioon yrityksessänne? *

Minkä seuraavien tahojen kanssa yrityksenne tekee yhteistyötä? *

Yliopistot

Tutkimusinstituutit

Muiden alojen asiantuntijat

Kilpailijat

Muiden, kenen?

Kuvalle minkäläistä yhteistyötä yrityksenne tekee näiden instituuttien kanssa. *