What does Innovation mean - a term without a clear definition

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Abstract

The purpose with this paper is to identify what people associate with the word innovation and why they do that. This is interesting because the word innovation is relevant right now in the world we live in. It impacts both the world economy and the standard of living. It is a key to international competiveness and something companies have to deal with in the everyday life. To get a deeper understanding innovation is defined. Literature is searched to find out what is written about innovation and the association with it. The method used in this study is a qualitative approach. A survey with a total of five items has been sent out through the internet to get a width of the respondents. Results from the study found that the most used associations was growth, new thinking and creativity. Innovation can persist growth, the respondents on the survey was then on the right track. Creativity is also something that the respondent found close to innovation. Innovation is defined as something new and different and is creative work. Why people associate this with innovation can depend on the close link between the business world, entrepreneurship and innovation. People learn about innovation at work or in school and it is therefore relevant to learn about the business part of innovation. Innovation extends beyond the business world and it is therefore important to get a broader definition of innovation. People need to get a better understanding of the width of innovation to be able to associate innovation with the right things. Innovations is something that exists in our everyday life and does not only impact the world economy but our daily life as well.

Key words

Innovation, creativity, growth, association, profitability, innovatory and new thinking.

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Introduction

There is a growing importance of knowledge and innovation to economic growth and technological competitiveness in all fields and it is a strong concern for scientist, managers and for countries in its entirety. The universities, business sector and the public sector all play an important role in the development of innovation. The key to innovation development involves a close collaboration with science, financing and technology and this has developed a model called triple helix model. Innovation is now days a key ingredient to manage the global competitiveness and companies have to deal with the creation of new products and services (Farniha, Ferreira & Gouveia, 2016).

There are different factor that influence a customer's decisions to either adopt an innovation or to reject it. This factors are following:

- Relative advantage
- Compatibility
- Risk Relative

An innovation has an advantage when it appears to be better the previous generation and has a high rate of adoption. An innovation also has a greater chance of getting adopted if it is compatible with people's experiences and values. The younger generation is more willing to take risks in innovation and we can therefore expect more willingness in taking on risk with innovative technology (Søilen, Nerme, Stenström & Darefelt, 2013).

Literature review

What is innovation?

Innovation is a word that is derived from the Latin word innovare, this means "into new". The simplest definition of innovations is doing something different. Innovation is a word that often is used in the business world and for companies this usually mean something risky, costly and time consuming (Costello & Prohaska, 2013). Innovation can also be explained as s new idea, product, device or novelty. It is a mind-set, a way of thinking beyond the present and into the future. Innovations is important for companies and when used well it can be a process, strategy and management technique (Kuczmarksi, 2003). Innovation can at a fundamental level be the process of generating and combining ideas to make a relationship between present accomplishments and past experiences to solve a future problem. This is often associated with technological feats and it play a critical role in the world economy (Baskaran & Mehta, 2016). Innovation is big in the business world and is sustainable to create value and be strong in the competitive environment. There is a link between innovation, jobs, profit and standard of living. A common way to associate innovation with is new products, materials, new process, new services and new

organizations. There is a range of definitions for innovation witch often overlap and there is no clear and authoritative definition. Scientist point towards this problem and without a clear definition of innovation it will be hard to develop strategies to be innovative (Baregheh, Rowley & Sambrook, 2009).

Baregheh, Rowley & Sambrook (2009) brought a suggestion of a complete and multi stage process definitions of innovation: "Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace"s.1334.

Other definitions for innovations is that it is a process of getting new tools into a given social environment or a new tool itself. New studies shows that the definition is much broader. Innovations initiating new process or events, it also bring changes in behaviour, personnel and approach and encompass much more than simply establish an effective tool (Reiman & Dotger, 2008). Innovation can also be described as a method and technology for new markets, new product methods and identification of new customer groups. Innovation is an activity which companies solves problems by combining knowledge (Fri, Pehrsson,& Søilen, 2013). Innovation can have different definition depending on which area you are in. The technological innovation is defined as a new market and/or a new service opportunity for a technological based invention which could lead to development, or production success (Garcia & Calantone, 2002).

There has been studies that found a positive relationship between creative climate and innovation. If your workplace encourage a creative climate it can moderate effects between leadership, individual problem solving, group relations and innovation. The association between creativity and new ideas is close (Gisbert-López, Verdú-Jover & Gómez-Gras (2014).

Association with innovation

The link between innovation and new product management is close. Teams have to work close together in companies to create new and innovative products. Technology is also something that often has a connection to innovation. A product that is a combination of other products but with new technology is also seen as a new innovative product (Leenders & Dolfsma, 2016). Innovation also has an association to growth. Studies has shown that innovation can create opportunities to persistent growth (Denicoló & Zanchettin, 2016). Companies strive after growth and the strategy of innovation has been suggested as the best strategy in the fight for growth. The word "innovation" had become a buzz over the last decades and business leaders mean that you have to be more innovative to stay in the game. Innovation is more than just gaining knowledge it is continuous learning. Knowledge had to be translated in to actions. Innovations appears

as a key component of growth because it creates new markets space and revenues on the way (Sardana, 2016).

According to Tienken (2013) innovation is a possible outcome from creativity. Creativity is something unique and new and creates innovation and entrepreneurship in countries. Innovations and creativity is similar in the way of new thinking (Tienken, 2013). Innovation is also associated to problem solving, it is either a solution to a new problem or a novel solution to an old problem. To be innovative is to think in problem-solving ways, to exploit new resources or use the existing resources in a more efficient way. To be problem-solving in nature often leads to innovation and new thinking (Huebner & Fitchel, 2015). Innovation and leadership has showed to be a successful combination when it comes to revenues for a business (Bock, Eisengerich, Sharapoy & George, 2015). Studies has found that innovation management may not only change an organization but also bring benefits to it and redefine the company with the spreading of new ideas. Leadership can effectively stimulate innovation and new thinking. Innovation management is though pretty new to the world and not that used yet (Vaccaro, Jansen, Van den Bosch & Volberda, 2012).

The way people learn about innovation and what it is often occurs at work or in school. In work people learn to practice and be innovative when it is an open debate, open and honest exchange of ideas. In higher education it is teach by showing and sharing new technology and let the students be open minded and open for debate (Cohn, 2008).

Method

This is a quantitative study to examine what people associate with innovation and why. To investigate this a questionnaire with a total of five items has been sent out. The survey was placed on the internet for a width of respondents. The items that was chosen for the survey was based on literature and scientific papers on the subject innovation. With regard to the literature association growth, leadership, profitably, life s, creativity, new thinking, knowledge, solutions, innovatory and problem solving was chosen as alternative answers for the questions. The population has been restricted to people that have and use Facebook. Facebook was used as a platform because it was a simple way to reach out to a large range of people. In total information has been gathered from a sample of two hundred respondents.

The method of sample is a simple random sample were the answers has the same chance of being chosen. The survey is anonymous and the extent of interference is therefore minimal. The study is descriptive and refers to describe what people associate with innovation and why they do that.

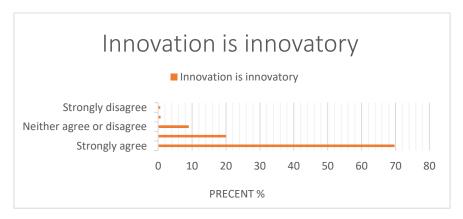
The reliability of the study can be considered at two different levels. First the reliability can be classed as high because it is easy for anyone at any time could ask the questions and get the same results in this population. On the other hand it is not certain that other researchers would have chosen the same questions to investigate the issue and it is therefore hard to say that the study has a high reliability. The validity of the study can be considered to be high because the variables that has been used is equivalent to the questions. A great deal of analysis units selected at random and it should therefore be possible to generalize the results.

The literature that have been used for this study was found on databases for scientific papers. The databases are Scopus, Web of science and Summon. To get relevant information key word as "innovation", "association", "innovation science", "innovation in business" and "innovation management" has been used.

Results

The results from the survey shows that most of the populations relate innovation with growth, new thinking, creativity and something innovatory. A big part of the population also agrees that innovation is problem solving. When it comes to the question if innovation is important there is a greater dispersion.

The first statement in the survey was: "innovation is innovatory". This statement was chosen because innovation is a word that comes from the Latin word innovare that means "into new" (Costello & Prohaska, 2013). The most definitions of innovation mention that it is something new and it is therefore important to know if the population also agrees to this. For this item I have used a five point Likert scale were the respondent could choose in between "strongly disagree" and "strongly agree". In this way the respondent could choose a natural answer if they were uncertain.

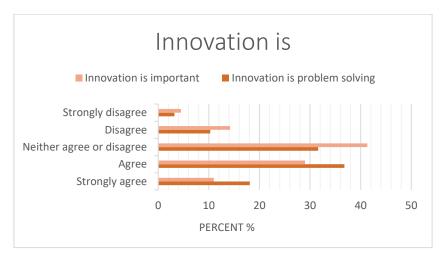


Of the two hundred respondents sixty nine percent answered that they strongly agreed that innovation is innovatory. Twenty percent answered that they agreed. Nine percent

answered that they neither agreed nor disagreed and the rest two percent disagreed or strongly disagreed with the statement.

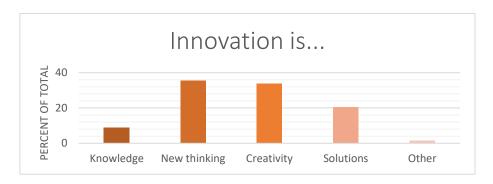
The second item was "innovation leads to something important". This statement was chosen to see if the population thought innovation was something meaningful and important. The item also had a five point Likert scale where you could chose in between "strongly agree" and "strongly disagree".

The third item was "Innovation is problem solving". This item was chosen because it was easy to fins literature that associated problem solving with innovation. But also mention that problem solving often leads to something new. The item also had a five point Likert scale where you could chose in between "strongly agree" and "strongly disagree".



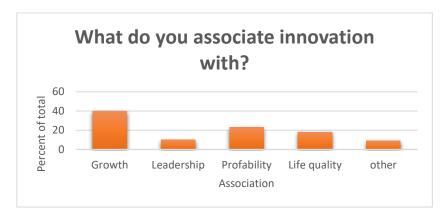
Of the two hundred respondent only twelve percent answered that they strongly agreed that innovation leads to something important. Twenty eight agreed and entire forty one percent neither agreed nor disagreed on the statement. A total of eighteen percent either disagreed or strongly disagreed. When it came to if innovation is problem solving fifty percent answered that they agreed or strongly agreed. Thirty two percent answer that the neither agreed nor disagreed and the rest twenty eight percent either disagreed or strongly disagreed.

The fourth item was created as a sentence where the respondent could choose between five alternatives. The sentence was "innovation is" and the alternatives was knowledge, new thinking, creativity, solutions and other. The respondent could choose more than one alternative and under other they could fill in a word that did not existed as a given alternative.



There was for hundred and ninety nine answers and of them approximate thirty six percent thought innovation is new thinking thirty four percent thought of creativity as innovation. Nine percent of knowledge and twenty of solution. One percent answered other and there it was seven people that said that innovation is something usable in the market.

The last item was a straight on question "what do you associate with innovation?" Here the respondents could choose between five alternatives, growth, leadership, profitability, life quality and other. The respondent could choose more than one answer and on other they could fill in an own word.



There was three hundred and forty nine answers and forty percent of the answers was growth. Twenty three percent answered profitability, eighteen percent on life quality and ten percent on leadership. Nine percent answered other and the alternatives there was, *new thinking, change, technology* and *development*.

Analysis

The literature mention a range of different definitions of the word innovation. The simplest one but still usable is the definition mentioned by Costello & Prohaska (2013) that innovation is doing something different. They also mention that the word innovation from the beginning is derived from the Latin word innovare which means into new. Another definition is that innovation is a mind-set, a way of thinking beyond the present and in to the future. This could either end up with a new idea, product, device or novelty

(Kuczmarksi, 2003). Three scientists, Baregheh, Rowley & Sambrook (2009) tried to come up with a complete and multi stage definition of innovation. There definition said that innovation is a multiple stage process where organizations transform ideas to new products, processes and services so they can stay competitive and somehow different themselves successfully in the market. Innovation is also described as technology for new markets, new products and to be able to identify new costumer groups. Innovation is then an activity for companies to use for solving problems (Fri, Pehrsson, & Søilen, 2013). The technological innovation is also defined as a new marker or service opportunity but for a technological based innovation that could lead to product success (Garcia & Calantone, 2002). These definitions are somehow connected to business or products. The question then will be if innovation simply only exist in the business world. There has been new studies that showed that innovation is a much broader concept. Innovation is to take initiative to new processes and events. It can also change in behaviour, personnel and approach. It is more than just establish an effective tool in business (Reiman & Dotger, 2008). Still the most definitions fined in the literature somehow has a connection to products, services, strategies or business overall.

The range of definitions somehow overlap but there is no clear and authoritative definition. Some scientist has pointed this as a problem. If there is no clear definition of innovation it can be hard to develop strategies to be innovative (Baregheh, Rowley & Sambrook, 2009). Innovation play a critical role in the world economy (Baskaran & Mehta, 2016) and it is therefore important that people know what innovation really is. There is a link between innovation and jobs, profit in companies and standard of living (Baregheh, Rowley & Sambrook, 2009). If people do not know what innovation really is and therefore also makes the "wrong" associations to innovation there might not be a development of innovation, which is important for our economy and way of living.

Then the question also is what people associate with innovation, is it the "right" things and is there really a right way of describing innovation? The literature mentions some associations to innovation that might could be seen as "right" but might depend on which definition they have used. Leenders & Dolfma (2016) mention that there is a link between product management and innovation. An association with innovation is new products that companies can create. They also mention the association to technology, that a product that nor really are new but uses new technology is range as an innovation to. This associations merged well with the definitions about innovation that has the business touch like Garcia & Calantones (2002) definition that technology innovation is a new market or service opportunity. In the survey that I sent out to two hundred respondents some of the respondent mentioned new products as an association to innovation. There was not many but it can depend on that it was not a given alternative to the items but they could write it in as "other". It is therefore hard to know if the respondent should have chosen that if it

was a given alternative. The literature mention it as an association that also merge with one of the many definitions, then this might also be an association that people make.

According to Denicoló & Zanchettin (2016) innovation has an association to growth. Innovation can create opportunities to persistent growth in companies. This association also has a connection to business, but this time it is not because of creation of something new. This association speaks of the effects of innovation in companies. Growth is something most companies strives after and it has been said that innovation is the best strategy in the fight for growth. Innovation is one of many key components of growth just because it creates market space and revenues on the way. (Sardana, 2016). In the survey one item was, what do you associate innovation with? The most answered alternative to this item was growth. From three hundred and forty nine answers forty percent of the answers was growth. This means that people agree to the association with growth. People look at innovation as something that companies using to grow and reach new markets. According to Sardana (2016) innovation is more than just gaining knowledge it is continuous learning and that the knowledge also has to be translated in to actions. Once again it is hard to know what innovation really is if it is something that is continuous and changes on the way. The lack of clear definitions makes it hard to know if we all have the same opinion of innovation.

Then there also is a side of innovation that is connected to more than just business. Innovation also has an association to creativity. Creativity is something new and unique and creates entrepreneurship and innovation in countries. Innovation and creativity is similar in the way of new thinking (Tienken, 2013). There has been studies that found a positive relationship between creative climate and innovation. If your workplace encourage a creative climate it can moderate effects between leadership, individual problem solving, group relations and innovation (Gisbert-López, Verdú-Jover & Gómez-Gras (2014). From the survey there was many of the respondents that both associated innovation with creativity and new thinking. On the item innovation is I got hundred and ninety answers, approximate thirty four of them was the alternative creativity. Thirty six of them was the alternative new thinking. They were the two most outstanding answers and it seemed like the respondents agreed about that innovation is both creativity and new thinking. Innovation and creativity had the common component of new thinking which makes it natural to associate both creativity and new thinking to the word innovation. These associations is interesting because they do not have a straight connection to business and companies like the associations I mentioned above. Creativity is something that everyone can have a connection to either if you do not have any connection at all to the world of business. Creativity and new thinking is something that is more adaptable to everyday life and might mean that innovation is something that exist all around us.

Then there is an association that has a connection to everyday life but also to the business world. Innovation is also associated to problem solving. This could either be a solution to

a new problem or a novel solution to an old problem. If you are problem solving in nature it often leads to innovation and new thinking. To be innovative means that you think in problem-solving ways, exploit new resources and use the already existing ones in a better way (Huebner & Fitchel, 2015). In the survey one statement that the respondents had to rank was *innovation is problem-solving* they could choose on a five point Likert scale between strongly agree, agree, neither agree or disagree, disagree and strongly disagree. Of the two hundred respondents thirty seven percent answered that they agreed and eleven percent answered that they strongly agreed. If you put them together approximate fifty percent answered that they agreed to that innovation is something problem-solving. Thirty two percent answered that they neither agreed nor disagreed which is a pretty big number. There was only twenty eight percent that disagreed or strongly disagreed to this statement. The respondents agrees to the association to problem-solving and might be because it had a closer connection to everyday life but it might be because they have a definition of innovation as problem solving. When there is no clear definition it might be easier to make personal preference to what innovation is and what you choose to associate it with.

Innovation and leadership has showed to be a successful combination especially when it comes to business and its revenues (Bock, Eisengerich, Sharapoy & George, 2015). Studies has found that leadership and innovation together can change an organization to its better by the spreading of new ideas that bring forward many benefits. Leadership can when used right, effectively stimulate innovation and new thinking (Vaccaro, Jansen, Van den Bosch & Volberda, 2012). Of the three hundred and forty nine answers I got from the survey on the item *what do you associate with innovation?* Only ten percent answered the alternative leadership. That is thirty five persons out of two hundred. That not everybody have that association might be because that innovation management is pretty new to the world. People have not yet had time to run into it or heard so much about it. Once again there is new creations of innovation all the time which makes it hard to define it.

There is one thing that people strongly agreed about in the survey and it was that innovation is something innovatory. That innovation is innovatory can be seen as obvious but it is perhaps the simplest and most accurate definition to innovation. Innovation means into new and is like mentioned before originated from the Latin word innovare. Out of two hundred respondents in the survey seventy percent strongly agreed to that innovation is innovatory and twenty percent agreed. This means that it is only ten percent that either did not know what to think or disagreed with the statement.

Other things that was mentioned in the survey as alternatives to associations to innovation was profitability, life quality, solutions and knowledge. It was twenty three percent out of the three hundred and forty nine answers I got that associated innovation with profitability. This association also has the connection to business and companies. According to Sardana (2016) innovation was one key component to growth because it creates revenues which in its turn creates profitability. It is an association that is in some

way is linked to other associations that have the connection to business. The association to life quality is connected to what Baregheh, Rowley & Sambrook (2009) meant with that the standard of living is improved when there is innovation in the world. New technology, products, etc. all contributes to a improved standard of living and in some way better life quality. The association to solution is according to Huebner & Fitchel a solution to a problem. It is the result of problem solving and problem solving is innovation. This could be a new solution to a new problem or a new solution to an old problem. That knowledge could be an association to innovation is relevant in the way that innovation is continuous learning and knowledge that is translated in to actions (Sardana, 2016). Innovation can be an activity when you solve a problem by combining knowledge (Fri, Pehrsson, & Søilen, 2013).

There is a couple of associations that people make to innovation, some more common than others. The most common associations is according to the survey new thinking or innovatory thinking, creativity, problem solving, profitability and growth. These association are consistent with the literature about innovation and makes sense. The definitions that exists of innovation on the other hand are not always consistent with the association that I found in the survey. This can depend on that there not really is a clear definition of innovation that cover all the areas that is needed. It can be hard to create a definition that cover all the areas because innovation is something that develops and change over time. Even if, Baregheh, Rowley & Sambrook (2009) tried to make a complete definition it is still not fulfilled. This definition only cover an organizational and business part of innovation.

Innovation is much broader to only fit in the business world, it is something that exists in the everyday life. Innovation is to take initiative to new processes and events which can occur also in daily life and not only in business (Reiman & Dotger, 2008). The problem with a non-consistent definition and the associations that often is connected to the business world is that people might not really know what innovation is. Innovations is broad and change over time. There is a need to make a definition that work in all areas and is adaptable. If it is possible to create this kind of definition people will get better knowledge about what innovation really mean and what they can associate it with.

Conclusions

It seems like there is not only one association with innovation. In the survey I found that people think that innovation is something innovatory and associate innovation with something new. Fifty percent also thought that innovation is problem-solving and associate that with innovation. Creativity, new thinking and growth also was associations that the respondents thought of when they heard innovation. This can be a result of the close link between the business world and innovation and therefore people connect

innovation with terms that is often used in business. Other things that some people associated with innovation was leadership, profitability, knowledge, life quality and solutions. Innovation can prove to create a better standard of living and that might be a reason for the association with life quality. A smaller part of the population also associated innovation with change, technology and development.

There is no clear and persistent definitions of innovation and this can be a problem. People can have different thoughts about what innovation is when there not is any clear way to define it. If people do not know how to define innovation then they will not know what to associate it with. The large proportion of definitions that are connected to business do not give a true picture of what innovation really is, it extends beyond the business world. If people are going to get better knowledge and a truer picture of innovation there will need to be a development of definitions on innovation.

Implications and future studies

The results from this study clarify what it really is that people associate with innovation. It seems like it is a large proportion of the population that associate innovation with growth and creativity. The literature supports the results from the survey and creativity and growth are natural and common to associate with innovation. There is a doubt if innovation really leads to something important. I think it is important to show the good things in society and the world economic that innovation provides. The study has to some extent developed an understanding on what innovation means for people and how it is defined. The study also found out that there is a need of developing a better definitions of innovation. If people are going to understand the word innovation and be able to be innovative they need to know what it really is. The study has some limitations, the study is not structure to specifically evaluate factors related to why the associations are made. Another limitation is the relative small population sample that was used for the survey.

Future studies is required to determine if this associations can be generalized. It is recommended to dig deeper and make a broader study in the subject to find out why people make this associations to innovation. Further studies can be done for existing companies. It can be of great value for companies to find out if people think their products are enough innovatory and "in time".

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