Regional Innovation Strategy that doesn’t exist

– The Case of Duhok Region

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First of all I just want to say thanks to everybody that’s been there for me and made this essay possible for me. I had never thought that I would go so far in academic studies. My aim was just to get Bachelor scholarships so it could be easier for me to get a job, but the story didn’t end there… I’ve done miracles way beyond my limits. Who knows, I might apply for a PhD…

The second thing is that I am grateful to everyone who wanted to be interviewed and who made this possible for me to move forward with the essay. I’m grateful to everyone that has been supporting me in this master’s degree examination. I’m grateful for the help I have got from the business developer, Marius Wenneson; he helped me with the development of a model and pushed me beyond my limits. I’m grateful that I had a supervisor that is supportive, a good listener and also an understandable pathfinder.
Abstract

Course: Regional innovation strategy that doesn’t exist
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Keywords: Innovation, Innovations strategy

Purpose: The purpose of this study is to examine the Duhok region’s innovation strategy and to be able to see how regional development and the entrepreneurial development tackle the innovation and innovation strategy in everyday life.

Theory: The starting point for the theoretical framework for this study is the concept of innovation – what is it and why is it valuable to an organization? But the focus of the study is to compare the Sörmland region innovation strategy with the Duhok region innovation strategy, if Duhok has an innovation strategy. The theoretical description that follows in this chapter is based mainly on secondary data in the form of scientific papers and books in the areas mentioned above. Great emphasis has been placed on the source-critical criteria mentioned in chapter two in both the selection and review.

Method: This second chapter provides a detailed description of the approach used in the study. Selection of the research approach and perspective on the interpretation and analysis, and it will give the reader an understanding of the study process.

Empirical result: In the empirical chapter, the researcher has transcribed the interviews and made it clear they were interviewed response and summarized the text out of them replies received from persons interviewed.
Analysis
The researcher will analyze what he thinks is the most important for the research. The analysis chapter is an important chapter because of the result and the discussion.

Discussion:
In this chapter there would be discussion about regional innovation for Duhok region. In the Discussion chapter the researcher talks about implementation of innovation strategy with help from a model called The Strategy Planning (TSP) model. The creation of TSP and further researcher are also included in discussion chapter.
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Appendix I
Appendix II
Study introduction

1

Study introduction

This chapter provides a description of the problem and the purpose and the delimitation, which is the basis for the study. The chapter also presents the respondents briefly and the research question to be answered.

1.1 Problem

Ever since I started to study the innovation program, I’ve become interested in innovation development. Over the years as a student, I have been travelling to my homeland Kurdistan in Iraq. Kurdistan is divided between four countries Iran, Iraq, Syria and Turkey. **Kurdistan is a federal part of Iraq and from now on when I write Kurdistan it means that I’m talking about the Iraqi part of Kurdistan.** When I was in Kurdistan my cousin and his friends always asked me about my education and what kind of jobs I will work with. I’ve told them that I study Innovation technology (innovation management), and I can see in their faces that they don’t know what that it is and I get lots of questions about innovation. Not everyone knows what innovation is and they keep asking me in what fields I can use innovation. Those who know what innovation is are not many, and they complain that they can’t work with innovation because those who are in charge at the organizations or other regional places are mostly elderly persons lacking in modern understanding. I’ve done research about innovation and innovation strategy in Duhok and discovered that they are not very aware of innovation and innovation strategy as a concept. There is one article that I found and it’s written in Kurdistan at the University of Duhok and it’s written in 2010. This means that the authors have thought about innovation, but I haven’t seen any progress of innovation during the time I visited Kurdistan. It turned out that most people do not know what innovation is. Some people have heard about innovation, but only as an entrepreneurial context.

As an innovation student I have been taught that one should think outside the box, and everything is possible and nothing is impossible. Then I heard a voice in my head say "hm, not so bad", this can become something great if I can take the concept of innovation strategy and just spread it in Kurdistan, and Duhok region is the starting point. I had done a lot of brainstorming about the innovation subject before I even had a thought that I would write a master’s thesis. Sweden is at the top when it comes to innovation in Europe. However, my question was how to be able to think in an innovative way, where does one begin? The
conclusion I’ve made is to look at innovation strategy in the Duhok region, to get an overall view of innovation. I wanted to compare the regional innovation strategy in Duhok’s region with Sörmland’s region’s innovation strategy. Afterwards it would become clear what could missing in the Duhok region’s innovation strategy. **If Duhok has an innovation strategy of course, if not, then I had to look into the situation to see if there was any possibility to adopt an innovation strategy in the Duhok region.** I had taken for granted that Duhok region would have an innovation strategy, that’s why I wanted to compare with Sörmland’s strategy. When I as a researcher visited Duhok region in Kurdistan and interviewed some of the respondents it appeared that Duhok region didn’t have an innovation strategy. Then I had to change the research question and the supplementary questions to be able to connect the research and to answer that Duhok region was lacking an innovation strategy. The idea became to introduce an innovation strategy for the Duhok region and that could be a starting point for developing and increasing innovation in the region.

The main focus would be on the interviews that would strengthen the project. It would be useful to observe Duhok region, and examining the potential for an innovation strategy that could promote greater organizational innovativeness.

### 1.1.1 Question at issue

I have no commission in Kurdistan; the project is my own thought. I wanted to go to Kurdistan for my project research and to do my interviews, then use all the interview data to answer the research question **“What role could an innovation strategy play in the Duhok region?”** and then answering the three supplementary questions (SQ) regarding the essay.

The supplementary questions (SQ) with the problem as a starting point, the following questions guide this study:

*SQ1:* Are there any possibilities that Duhok region can adopt an innovation strategy?

*The next question is based on the first question, but it needs more focus on the learning.*

*SQ2:* What can Duhok learn from Sörmland’s strategy?

*The last question is discovering what Duhok can do to adopt an innovation strategy.*

*SQ3:* What can Duhok region do to adopt an innovation strategy?
Study introduction

1.2 Purpose
The purpose of this study is to examine the Duhok region’s innovation strategy and to be able to see how regional development and the entrepreneurial development tackle the innovation and innovation strategy in everyday life.

1.3 Delimitation
The study is limited to the Duhok region, in Kurdistan. There are about five to six universities in Duhok. Some of the universities have been chosen to do my interviews in, and I will be interviewing some politicians who are in charge of infrastructure and development in the Duhok region. External relationships will potentially be affected but without further thoughts.

1.4 Target audiences
The primary target for the study is universities and politicians. The study may be valuable for leaders in other public organizations that are interested in innovation strategy. From a theoretical perspective of research, the study also contributes to bringing the development of knowledge of innovation, which suggests that even academic staff and students can find value in the study content.

1.5 Innovation contribution
This study contributes to visualise the Duhok region’s innovation strategy. The goal is to be able to deliver a description of the factors considered to affect the Duhok regions role in innovation and what opportunities there will be for cultural development, entrepreneurial, university development and regional development regarding the innovation strategy. My personal goal with this study is that it will contribute to the development and innovation research by showing how an innovation strategy can contribute to cultural, regional and organizational innovativeness. Because of this goal, I intend to describe in detail the areas included in the study-defined context to thus enable that other groups should be able to find values in the study content.

1.6 Disposition
This study follows a traditional approach in terms of academic reports. In this introductory chapter, I have described the problem and the area the study involves and what the purpose is. Chapter 2 takes up the approach used in the study, the research approach and strategy that exists. Chapter 3 provides the reader with a description of the theoretical framework underlying the study. Chapter 4 presents Swedish innovations strategy, chapter 5 presents the Sörmland innovation strategy in brief, and chapter 6 presents brief facts about Kurds and history about Duhok region. Chapter 7 presents the results from empirical data collected
through interviews, the interviews included PhD’s (professors), politicians, CEO’s and engineers within the Duhok region. Chapter 8 brings together empirical and theoretical data, for an analysis of the data collected and answering the questions. This discussion forms the basis for Chapter 9, which summarizes the findings and recommendations of the study outcomes. My deepest fear is that if Duhok doesn’t have an innovation strategy, then the question will be how the researcher will deal with that. Then the researcher will complete the study with a few final words about the critical aspects of the study and suggestions for areas that should be further deepened.
Methodological description

2

Methodological description

This second chapter provides a detailed description of the approach used in the study. Selection of the research approach and perspective on the interpretation and analysis, and it will give the reader an understanding of the study process.

2.1 Selection of the research approach and perspective

As described in the previous chapter the explorative purpose of this study is to compare Sörmland’s innovation strategy with Duhok’s innovation strategy. Comparing Sörmland’s innovation strategy with Duhok’s innovation strategy in Kurdistan has been the researcher’s idea, because of visits to Kurdistan where the researcher noticed that Duhok region is missing something important and it is the innovation way of thinking.

The researcher in this study visited the Duhok region for two weeks to do interviews. That is the idea of doing this comparative research on innovation strategy. The researcher is involved in investigating what the possibilities are when it comes to the regional and entrepreneurial development of innovation strategy in Duhok. The study was not quantitatively measured how the innovation strategy in Duhok is. The researcher is using qualitative approach; the work itself was simplified as well as an understanding of both Kurdistan and its way of thinking on innovation. Qualitative research often includes theory and practice of identifying solutions to practical problems (Alvesson & Sköldberg, 1994). Alvesson and Sköldberg (1994), claim that qualitative research is more often reliable than a quantitative research.

Alvesson and Sköldberg (1994) make no secret of that they are skeptical to quantified approaches; the qualitative approach adds more weight to sentences and symbols that describe our social reality (Christensen et al., 2001). The researcher therefore sees that the qualitative approach in this study is more relevant regarding its focus on the understanding. A quantitative approach, according to Alvesson and Sköldberg (1994), often conceals social norms and ambiguities and therefore works better as background material for more qualitative studies. Since this study is exploratory, a qualitative approach was to be preferable since qualitative methods generally aim of discovering and illuminate the underlying processes in the social reality that is studied (Christensen et al., 2001).
Methodological description

The research process in this study is based on a qualitative approach that can be deprived from the user-initiated problem. The aim for the researcher was to investigate what the conditions were for innovation strategy in Duhok. The researcher describes below, the research perspectives that characterise the study.

2.2 The hermeneutic perspective

The hermeneutic perspective begins with textual interpretation in which the meaning of a part can only be understood if it is related to the whole (Alvesson & Sköldberg, 1994). This is a circular thinking which means that the innovation strategy can be understood only if it is associated with the Duhok regional development as a whole. Similarly, it is impossible to understand how the innovation strategy in Duhok works and can increase innovativeness among the population, the universities, and the organizations in the region regarding innovation strategy unless you look at both the parts and the whole. This reasoning is called” the hermeneutic circle” and is presented in Figure 1 below.

The circular way of thinking means that parts and the whole stands in contradiction to each other as a whole cannot be understood without the parts and the parts cannot be understood without the whole. To address this research, an objectifying hermeneutic spiral (Figure 1) is used to give a better description of the hermeneutic process. A spiral perspective means that the research gradually burrows down by alternately studying the whole and parts of a deeper knowledge process (Alvesson & Sköldberg, 2008).

![Figure 1 Hermeneutical circle respectively objectifying hermeneutic spiral (own processing)](image)

The objectifying hermeneutic circle in relation to the qualitative approach to the study’s research process assumes we can see how the study's procedural process manifested. The circular interpretation and reinterpretation of theory and the empirical result, means that the
Methodological description

overall problem consists of different meaningful parts that require a deeper understanding of the whole while the overall objective depends on a deeper understanding of parts.

The hermeneutic perspective within the qualitative approach of which this study is based on thus allows complex documents that in practice can be read as a text where organizational and individual actions can be seen as a meaningful sign of a larger whole (Alvesson & Sköldberg, 1994). But in the interpretation of data, the researcher stands not free from his experience and frames of reference. The term Tabula Rasa means, "painting without writing" but is used metaphorically to describe a person unaffected by emotions and expressions, "a blank slate" (NE, 2014). Within hermeneutics the researcher is never regarded as a tabula rasa, that is, free from the experience, skills and qualities, which mean that the understanding of someone and the whole process is always interpreted relative to the basis of the researcher's own frame of reference (Alvesson & Sköldberg, 1994). It is therefore possible, and even necessary, to add a dimension to the hermeneutic circle/spiral (Alvesson & Sköldberg, 2008).

When the researcher is studying the context that is being studied, the researcher is already charged with an understanding of the context being studied. During the process, the researcher therefore builds further on the theoretical understanding of the context being studied. It is therefore necessary to include the true hermeneutic circle. Important to emphasise is that the objectifying hermeneutic and the true hermeneutic do not conflict with each other. They represent different parts of the research process and can, with advantage, be part of the research process (Alvesson & Sköldberg, 2008). Both whole and part of the process is preceded by pre-understanding, which leads to new understanding (which in turn leads to new pre-understanding). It is therefore possible to see even the alethic (the true) circle as a spiral that is part of the objectifying helix and allows the researcher to move on in the research process. Above (in Figure 1) shows the differences between the objectifying spiral and alethic circle.
Alvesson and Sköldberg (2008) argue that facts never can be taken for granted because of the interactive process of interpretation. In order to distance themselves from their own frames of reference and assumptions – but also to ensure quality in study – it is therefore necessary to provide a discerning filter in the interpretation process to deal with the loss of objectivity in interpretation and analysis of data. We should therefore look closely at the source-critical approach followed in the study’s data collection.

2.3 Source of critical approach

A source of critical approach in the study means that the researcher as interpretation and analysis of the process uses a number of principles contributing to the objectivity of the examining data. Eriksson and Wiedersheim-Paul (2006) argue that source criticism also can be used as a kind of selection method in collecting data. The source-critical approach of the study includes theoretical sources of empirical material in the form of interviews. The researcher doesn’t live in Kurdistan, but the researcher visited Kurdistan for two weeks; in which the time to explore all the details was too short for the study process. The researcher’s role in this context is thus to gain information at the limited time of two weeks, which means that the researcher approaches Kurdistan and receives data through various kinds of theoretical and empirical sources. These sources convey an engineer description of reality that the researcher has to relate. The sources must be assessed from a number of source-critical criteria (Alvesson & Sköldberg, 1994; Eriksson & Wiedersheim-Paul, 2006).

Contemporary Requirement – This requirement affects the elapsed time between an event and a description of the event. The longer the time between the event and the description, the greater the discrepancy can be expected.
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Eriksson and Wiedersheim-Paul (2006) describe the contemporary requirement met by, for example, records or notes made while an event is taking place, while a posteriori constructed story about the same event does not meet contemporary requirements.

Tendency Criticism – is a way to manage the various interests that an informant may have to describe something in a certain way. Questions to ask might be: "What is the interest of this research in this issue? What has the respondent to benefit from using these words and phrases? Alvesson and Sköldberg (1994) disclose that the value of the source decreases in relation to the strength of the source, which may have been exposed.

Depending critic – refers to the dependency that may exist between different sources. It can also be described as the number of sources that preceded the current source (Alvesson & Sköldberg, 1994). It is worth emphasising here that the importance of the source really is what it claims to be (Eriksson & Wiedersheim-Paul, 2006)

Authentically – a source used must obviously be true. Using interview answer that is true refers to how trustworthy and honest the source is in its description. Here, the criticism tends to assist in understanding the intent behind the source.

2.4 Data collection
The qualitative approach in this study is based on the interaction between theory and empirical data. Data included in the study therefore consists of both secondary data and primary data. Secondary data refers to data that exist and that is "compiled in a different context and with a different purpose than for the current investigation" (Christensen et al., 2001: 88). Primary data in turn is data that compliment the secondary data collected and is adjusted to the specific study (Christensen et al., 2001). Listed below are the two types of sources.

2.5 Secondary data
The role the secondary data plays in this study is to provide an understanding of the reality being studied. It is relevant and valuable to go through previous surveys of the subject matter to get a foundation to build theoretical study on and to construct a coherent framework within. The theoretical framework defines the framework for the study area of concern discussed. The study comprises secondary data of scientific articles, internal documents, books, theses, essays and electronic materials from the Internet.
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The collection of secondary data has been made through structured and documented searches of available database: Emerald, Book-It, Google Scholar, Google Books, JSTOR, ABI/Inform and Social Science Research Network (SSRN). It should be mentioned that keywords in turn have been linked to the database and also inspired further search on direct sources or authors. Clearly present in the theoretical framework for the study, we find Rogers’ (2003) research on organizational innovativeness. This is a result of that Roger’s takes into account a variety of organizational variables that have an impact on an organization's ability to innovate. The model used in the study therefore contributes to operational the organization's innovativeness to make it useful for the purposes because then the researcher can focus on analysing the variables instead of first identifying the variables that have an impact on the organizational innovativeness – which is a study in itself.

The perspective that Rogers (2003) gives the study provides a theoretical basis for further analysis. The model thus means to explain the limit of the study's scope. The variables included in the model do not take into account the psychological factors commitment or motivation to any great extent. For a more comprehensive understanding of organizational innovation, the researcher recommends, therefore, that more models be used as to provide a more comprehensive picture of research in this area.

2.6 Primary data

In order to see if Duhok region had an innovation strategy and if the people were capable of using an innovation strategy, the researcher wanted to do a workshop. The researcher was well prepared for the workshop and wanted to understand their ability for innovation, but the workshop was canceled. Primary data is as mentioned earlier, data collected with a specific study in mind (Christensen et al., 2001). There are a number of ways to collect qualitative primary data, for example observations, experiments, interviews, and even qualitative surveys (Christensen et al., 2001). Given the study’s exploratory purpose of researching and understanding certain aspects of innovation strategy in Duhok, semi-structured interviews are used. Interviews have advantages in that they are flexible in nature and involve a responsive relationship between interviewer and respondent (Gillham, 2008). Semi-structured interviews mean that the interview is less structured than structured interviews but more structured than open interviews. A number of themes are the basis for the interviews, which can be derived from the theoretical framework of the study. The interviews are personal which means an opportunity for interactive dialogue between the interviewer and the respondent, and has advantages in that the respondent's own description can be generated (Bryman & Bell, 2007;
Methodological description

Christensen et al., 2001). The respondent’s included in the study are important individuals from the universities and from a political perspective, which means that both groups are included in the collection of primary data.

2.6.1 Selection of respondents
Those individuals who were elected to participate in the study were selected on the basis of a so-called probability sampling, as the researcher needed to get in touch with the most important individuals in their respective fields. In scouting for the respondents the researcher got the help of two of his cousins living in Kurdistan. Respondents were contacted by recommendations from the two cousins in Kurdistan. This may have resulted in the absence of persons that could have been important for the participation in the study. In qualitative studies, it may be feasible to use this type of selection when it is more important to find respondents with insight and knowledge of the problem area that can participate in the study than to maintain statistical representativeness (Christensen et al., 2001).

2.6.2 Implementation of the interviews
The researcher’s first two interviews were carried out through Skype interview. Skype is a computer program where you can make calls and video calls, the researcher made video calls with those who were interviewed by Skype. It is very difficult interviewing people that are elderly but don’t have much knowledge of innovation or they are not aware of if they have an innovation strategy in Duhok region, this makes the whole process more interesting. Two of the interviews the researcher has carried out by Skype interview as mentioned above. It was not the simplest task to have conducted the interviews by Skype, not being used to this type of interviews because it was the first time conducting interviews by Skype. It complicated the recording and once it was time to transcribe the interviews, it was not the easiest to understand what they said. It was necessary to fast forward and backs the interviews several times.

In November 2014 the researcher travelled to the Duhok region in Kurdistan to collect data for this essay. On the second day several universities were visited as planned. The researcher interviewed several PhD’s in Duhok’s university; the president of Cihan University and a few CEO’s running the companies were interested in being interviewed. All the PhD’s and companies were positive to the research and the questions. The interviews were made at the person’s work places. Before the interview started it was explained that the interview was going to be recorded to make it easy for the transcription. One interview took place at the researcher’s relative’s house a few days later. The last days of the research trip in Duhok
Methodological description

region, there was more to do than the first week of research. Things happened slowly at the beginning but after a while they noticed the researcher and everything started running as the researcher wanted.

Some of the interview persons didn’t like it when the researcher asked them if the interview could be recorded and they rejected it and said that they will answer questions by sending an email with the answer. “But we can talk about the answers right know to make sure if I understand the questions” said one of the CEO’s. The first thought was that they were afraid of answering the questions without permission from higher positions, and that’s why they wanted to send the answers instead. The lesson to be learned from this research is if visiting a developing country two weeks weren’t enough, a month would be better. As a researcher this is something to have in mind.

2.7 Data analysis and interpretation
The qualitative approach used in this study emphasises the mentioned interplay between theory and empirical data, which leads to an addictive perspective in the analysis (Alvesson & Sköldberg, 1994). The addictive perspective in the analysis is based on the qualitative approach with respect to the hermeneutic research strategy discussed above. Theory and empirical evidence together form a whole to be studied, but both theory and empirical data are in turn composed of smaller components that must be understood from the whole. Analysis and interpretation of empirical data and the theory is done procedural in a depth hermeneutic spiral. Qualitative data in the study consists of texts, words, events, and descriptions of people in a socially constructed context. This constructed reality can be analysed as a meaningful understanding of a larger whole (Alvesson & Sköldberg, 1994).

The difference being that the addictive perspective occurs at an operational level of analysis of empirical data and theory, while hermeneutics occurs on a more strategic interpretive level in the study. Alvesson and Sköldberg (1994) allow the similarity between adduction and hermeneutic. Qualitative analysis is always procedural, meaning that the collection and analysis of data occurs simultaneously (Christensen et al., 2001). This means that the researcher will relate these data with the theoretical framework and the researchers own understanding of the problem area. Analysis of theory and empirical work is done in this way at the same time as data is collected. Throughout the process, data is categorised into conceptual categories that consist of certain keywords or concepts that recurred during the research process.
Methodological description

Christensen et al. (2001) argue that qualitative analysis is characterised by three overlapping processes: reduction, structure, and visualisation. Briefly, the process the researcher has chosen is the process of the qualitative approach and the researcher will breakdown the collected data into smaller, more manageable parts (reduction), structuring elements into patterns that can be visualised in models. Any shortcomings in the models, causes additional, revision of empirical evidence and/or theory. The end of this description of the study's methodology is in place with a quality discussion. The intent of this discussion is to present the aspects that contribute to a high quality in the study. But what is quality in qualitative studies? Alvesson and Sköldberg (1994) demonstrates the quality as "value/utility plus credibility", an equation that shows the importance of being able to contribute something that is valuable and useful, at the same time it is also believable. Gillham (2008) argues that, with the idea that there are multiple "correct" truths in an interpretation of the reality; credibility has to do with an assessment of the credibility of the current interpretation. Personal values are thus always the basis for the personal frame of reference that researchers assume when assessing the credibility of the data. Objectivity is thus limited (Eriksson & Wiedersheim-Paul, 2006). But it does not mean that the quality of the study deteriorates. In these contexts are therefore concepts of validity and reliability often presented as a requirement for credibility?

Validity refers to the instrument's ability to measure what is intended to measure (Bryman & Bell, 2007; Christensen et al., 2001; Eriksson & Wiedersheim-Paul, 2006). It is however; legitimate to distinguish between internal and external validity, where the former concerns correspondence between theory and observation, and the latter concerns the generalising ability of the results beyond the current context (Gillham, 2008). In the qualitative studies, it will not statistically measure something but rather to understand the underlying factors and patterns. This means that it is not appropriate to apply a quantitative assessment on the internal validity’s statistical representatives (Christensen et al., 2001). The external validity in qualitative studies is usually relatively low, as these studies assume a special, distinct, situation. It may therefore be difficult to draw general conclusions that apply outside of that defined area (Gillham, 2008).
3 Theory

The starting point for the theoretical framework for this study is the concept of innovation – what is it and why is it valuable to an organization? But the focus of the study is to compare the Sörmland region innovation strategy with the Duhok region innovation strategy, if Duhok has an innovation strategy. In order to give an answer to this question, the researcher felt it necessary to operational the concepts of innovation strategy.

Based on the concept of innovation, the researcher has by previous research recommendations examined the innovation strategy. The researcher even found an article that was written by three PhD’s; they are working at Duhok’s University in Kurdistan. The researcher has personally met those three PhD’s. One of the PhD’s is more involved in innovation; his doctoral was about innovation drivers. The researcher did a lot of research but couldn’t find anything about innovation strategy. If the region doesn’t have an innovation strategy, then is the question for the researcher (TR): “Where does the researcher start?”

The theoretical description that follows in this chapter is based mainly on secondary data in the form of scientific papers and books in the areas mentioned above. Great emphasis has been placed on the source-critical criteria mentioned in chapter two in both the selection and review. The quality of the sources have been handled mostly using previewed articles and books, which means that the contents are examined by independent experts in the area described. The attentive reader may however notice that a couple of books, that can be described as non-scientific "management manuals", also are present.

3.1 What is innovation

“A new idea, method or device a novelty, a mindset, a pervasive attitude, or a way of thinking focused beyond the present into the future vision” (Kuczmarski, 1996, page 7). Tidd and Bessant (2013) argue that innovation affects everything people do and that innovation is everywhere, and that the ideas they describe is that innovation is a process that will benefit. The benefit that is made is that it is realised commercial products, processes or services (Tidd & Bessant, 2013).

“Innovation is driven by the ability to see connections, to spot opportunities and to take advantage of them” (Tidd & Bessant, 2013, page 7).
Innovation can be a process, a strategy, it is about benchmarking, and working in teams or, innovation is brand new to the world. Innovation is directed towards the engineering, management, or is it about leadership and responsibility (Kuczmarski, 1996). Kuczmarski (1996) says that innovation is all that has been mentioned above; if one manages innovation in a good way they will be leading the innovation. Kuczmarski (1996) attacking organizations in which their CEO is afraid of innovation, he points out the disadvantages of the organizations which do not have innovation strategy, it could be because the CEO does not have the right knowledge for innovation, therefore they don’t dare to use innovation.

“Although you cannot touch it, smell it, hear it, see it, or taste it, you can sense, think and feel innovation. Innovation is best described as a pervasive attitude that allows businesses to see beyond the present and create a future vision” (Kuczmarski, 1996, page 7).

Kuczmarski (1996) say that organizations that haven’t implemented innovation in their organizations are because; innovation scares most CEO’s because they believe that innovation and risk-taking cannot distinguish between them. There are organizations that claim to have innovation within the company but Kuczmarski (1996) says organizations pretending to them, innovation has in order to have power. Kuczmarski (1996) has also pointed out that most companies are not accustomed to the aggressiveness with which innovation has, and it requires that you invest in innovation. It’s not about that companies should only contribute with money in the form of resources to R&D will investigate and to bring new research on product development. Innovation is a hot topic and it is used more and more, innovation is about strategic planning of meetings and the approach of innovation. The CEO of a company starts to invest in innovation, then they get a shock when they see that it’s one thing to just talk about innovation, and it’s another thing when you start using innovation, resulting in completely different resources, etc. (Kuczmarski, 1996).

In order to change the organizations’ operations, the organizations must become true innovators in recent times; this change can be a reward that they will never forget. The people who started changing the company will notice that changes occur because the companies’ culture changes from the old to a new established innovation mindset culture. The risks are becoming less and the organizations begin to have more creative thinking and a creative mindset. Because of the growth of the organizations and that they will become more radical in
product- and service development, the organizations can create a more competitive strategy (Kuczmarski, 1996).

To create radical innovations and business change or competitive strategy does not happen in a day or weeks, months, it may take time before everything is in place. Since the development phase is the phase where there are changes all the time, the organization has come up with a strategy that they have the mindset to implement the organization, and then they do it. But after implementation should not the organization leave everything behind just because they have implemented a developed innovation strategy of the organization strategy may not be fully developed the need for continued to work and dedication (Kuczmarski, 1996).

Kuczmarski (1996) has also said that there are barriers that prevent the development work. The organizations need to have a concept for innovation, and needs to know what is going to be included in the process and what needs to be done to develop innovative thinking. Tidd and Bessant (2013) pointed out that Schumpeter has said that: The entrepreneur is willing to seek after new challenges using technological innovations like a new product/service or a new process for adopting strategy. Innovation is like a game because there will be other entrepreneurs that want to rewrite the innovation history by changing the rules of innovation and everything will start from the beginning again. The scientists are constantly searching for for new ideas to be created and it's called the process of creative destruction. By this it means that when creating new ideas, new rules will be born and the old rules won’t be effective. So the old rules get destroyed, because the entrepreneurs will find new sources that will profit the entrepreneurs. Entrepreneurs that are lagging behind in the development will see what the other entrepreneurs have achieved (Tidd & Bessant, 2013).

3.2 Innovation process

Innovation does not arise on its own, but it is required to organise and to have a strategy to cope with the process that is risky by being able to do something with the idea to give a value (Tidd & Bessant, 2013). The process of innovation is a process that begins with that you should generate ideas to implement ideas where the process is fundamentally based on that you should weave together the knowledge and resources (Tidd & Bessant, 2013). The entire innovation process is a learning experience that never stands still. Things change constantly as you have to be aware of it. Whoever stays up and is satisfied, others will soon overtake it. You will also need innovative activities to cope with the process.
Innovation is a generic and generic associate with survival and growth, the fact is the innovation process is underlying process for strategies, organizations and firms. The innovation process involves four categories:

- **Search** → How can we find opportunities for innovation? Scanning for internal and external environment, to gain information about opportunities and changes and looking for threats.

- **Select** (What are we going to do – and why? Decision making about strategies and development of strategy and the response of it.

- **Implement** (How are we going to make it happen? Looking at the potential of innovation that will trigger the idea, for example the idea of implementation of innovation strategy and launching the strategy in the region internal and external. It won’t be that easy to implement strategy because it requires attention of the group for needed knowledge, resources to enable innovation strategy. There will be a lot of problems solving and breaking barriers until implementing the strategy.

- **Capture** (How are we going to get the benefits from it? The value of innovation is the sustainability, the diffusion and the learning process of understanding the innovation and its knowledge (Tidd & Bessant, 2013).

![Figure 3 A model of the innovation process (Tidd & Bessant, 2013)](image)

### 3.3 What is strategy

"What is strategy?" The researcher answers the question, in this way. Strategy is a plan that aims to achieve a specific objective. Strategy is about gaining position of benefit over opponents or competitors. It can always be uncertain and there are risks involved with the decision of the strategy. "What is strategy?" The question is aimed at strategic alternatives by choosing an approach. Strategy is more about a set of options or strategic choices.
Mintzberg (1987) answers the question by saying that strategy has many meanings and explains his thoughts about strategy. The word strategy has been used in different ways because the word strategy is defined as a single word (Ghoshal, Lampel, Mintzberg & Quinn, 2003). Mintzberg (1987) has developed and divided the word strategy into five definitions about what strategy is; plan, ploy, pattern, position and perspective. They will be presented below.

Figure 4 The Five P’s (own interpretation from Mintzberg, 1987)
Theory

3.3.1 Using the five P’s
Instead of trying to use the five P’s as a process and at the same time developing strategy, the idea is that the individual should consider different points of view that strategy should be considered in order to develop a successful strategy. The five P’s are important to the planning process. When collecting information to be analyzed and to investigate what is needed for strategy development, it is important to be confident and consider what is relevant to the strategy (Mintzberg, 1987).

3.4 Regional innovation strategy
The innovation strategy contains two subsystems one is knowledge generation and the other is knowledge application (Autio, 1998). The two subsystems have been expanded with a third subsystem and that is regional policy. Tödtling and Trippl (2005) have developed the third subsystem, see Figure 5.

![Figure 5 Key elements of regional innovation systems. Source: Autio (1998), Trippl (2006), Tödtling & Trippl (2005)](image)

Distribution of the cluster is called knowledge infrastructure (Trippl, 2006) when the objective and organizational infrastructure is supporting innovation that’s the reason why it’s
called the knowledge infrastructure (Doloreux, 2002). Knowledge infrastructure is about the private and public organizations that are ongoing in the distribution of knowledge, skills and expertise (Autio, 1998; Trippl, 2006; Tödtling & Trippl, 2005).

The organizations are involved in implementation policy of the regional political subsystem (Trippl, 2006). The importance is to take advantage of the secure knowledge, and capital and resources since it is a local interaction in the basic innovation strategy. There are formal and informal institutions. Formal institution is about laws of regulation and informal institutions are about methods and procedure (Trippl, 2006; Tödtling & Trippl, 2005).

When it comes to connecting national and international regional innovation strategy it will be like an invasion of knowledge (Autio, 1998; Trippl, 2006; Tödtling & Trippl, 2005).

3.5 Knowledge implementation and utilization of the subsystem

Knowledge implementation, which supports the physical organizational infrastructure, is also known as knowledge infrastructure or support innovation infrastructure (Doloreux 2002). The Figure 6 is a model of industrial, academic and public sectors that represent the triple helix. The triple helix model shows a triangulation (see Figure 6); the points of triangulation that overlap makes an interaction point called the triple helix (Etzkowitz & Leydesdorff, 2000).

Organizations that are included in innovation strategy are those organizations that consolidate about the development. When it comes to innovation strategy, the organizations share the knowledge within the region (Smedlund, 2006). Universities are the cores to be the consolidators when it comes to take the research from the universities to the market (Muscio, 2010). When the research from the universities goes to the market it means that the organizations are supporting the creation of innovation (Inkinen & Suorsa, 2010) this is due to promotion of collaboration between the key
organizations in the region due to the innovation strategies. For example, creating a forum for regional innovation strategy and a website where all the actors in the innovation strategy are gathered at one place. The region will be more attractive for entrepreneurs, which will attract people to the region (Smedlund, 2006).

Knowledge infrastructure can be divided in several groups that are related to the function of knowledge infrastructure. Tödtling and Trippl (2005) support Autio (1998) with his idea of dividing the knowledge infrastructure in four types of organizations. The four types are research organizations, technology organizations, educational organizations and workforce organizations. Doloreux (2002) wasn’t satisfied with Autio’s (1998) idea of dividing knowledge infrastructure into four types. Doloreux (2002) instead divided the four types of knowledge infrastructure into three types of innovation that support the strategy. The three types of innovation that support the strategy are knowledge deployment, production, and coordination of knowledge. Doloreux (2002) categorises the knowledge infrastructure in production and coordination of scientific and technological knowledge as well as education and R&D, Research and Development, in technology. The universities are good collaborators with R&D and other national laboratories when it comes to contract researching, according to Doloreux (2002). When mentioning contract researching it’s about research-oriented organizations like VINNOVA, Swedish Agency for Innovation Systems, and R&D (Edquist, 2005).

The universities are very good at working with knowledge, because the knowledge spreads from universities to industry organizations, to political organizations, to marketing management organizations and many more. Knowledge spreading is about recruitment of graduated students, staff exchanges, joint research, contract research, and much more (Muscio, 2010). The universities have a major role in innovation strategy; the universities educate students, to transfer knowledge to organizations and industries. The students’ knowledge to industries and the students are the future development of the innovation strategy when it comes to informing politicians and the public sector (Caniëls & van den Bosch, 2011).

In other countries it is the government’s role to transfer the knowledge of innovation strategy regarding R&D. In Sweden it is the opposite, the universities have the major role in transferring the knowledge of innovation strategy regarding R&D (Edquist, 2005; VINNOVA, 2006).
R&D in the USA does research and the research shows that the universities’ research is basic research compared to the government research, according to Bozeman (2000). Universities are interested in the technology and publication of scientific research. The government is interested in interdisciplinary research. Universities are not to do interdisciplinary research because universities are rigid organizations according to Bozeman (2000). Bozeman (2000), also says that universities are at the same disciplinary guidelines as for the past 50 years. That’s the main reason R&D and universities are apart. The presence of students in the universities acts as knowledge transfer from universities. The universities’ basic research have an economic effect because universities are better with basic research, and basic research is helpful for the industry because industries are based on yesterday’s basic research, which means that their technology is lagging behind according to Borysiewicz (2012).

The University of Cambridge works with applied research; there are a number of functions that support innovation strategy, Science Park (Business Park), incubators and many more according to Borysiewicz (2012). The availability of university knowledge is a fact that the availability from a university have different sources in different fields, the result is interesting when it comes to interdisciplinary innovations. There are high tech companies in Cambridge and few of those companies have arisen from the University of Cambridge according to Borysiewicz (2012). Organizations support innovative companies whether they are small or medium companies, as long as they include innovation strategy. The kind of support they receive is consulting, information and more (Hassink, 2002; Tödtling & Kaufmann, 2002).

To help small and medium enterprises the technology is not the solution. What the small and medium enterprises need is business support like counselling, training for employes and funding (Smedlund, 2006). When business support is mentioned, it talks about incubators that have a major role in development for start up and the incubators help the companies to grow by helping them with management, economy, technical and commercial support. VINNOVA is a Swedish organization that works with innovation strategy and innovation development, VINNOVA (2004) has written an article about incubators in Sweden. The Swedish incubators are located with science parks or business parks.

3.6 Clusters
Innovation strategy needs clusters to be able to employ the knowledge. A cluster is a group of organizations that are connected as a network. Clusters are connected companies and associated institutions in the same fields (Porter, 2001). The organizations are not just linked
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to one cluster; they can be linked to multiple clusters. In the same time they are creating a sub
cluster, in other words they are creating subsystems. Innovation strategies are affected
positively in a cluster environment. Cluster is all about the collaboration among the
organizations in the clusters and the organizations have different experience they share with
each other (Porter, 1998; Porter, 2001). The collaboration is in the innovation strategy cluster
that is often communicating and networking between the organizations in the cluster.

Clusters is not a new phenomenon, it goes far back. When a problem occurred the local
people had to deal with the requirements and the requirements made a local cluster. Clusters
can arise from other clusters and some clusters arise when organizations work with each other
to gain innovation and growth in different directions, there is no doubt new clusters will
occur. The result of new clusters occurring is because everything goes in cycles and new
information appears when it comes to service, specialised training, infrastructure and more.
This phenomenon will increase the visibility of clusters. When a cluster becomes larger and
grows it benefits those in the cluster because it has greater influence and confidence, the ties
between the politicians, public and private sector.

Everything can change suddenly when new technology has arrived, these changes can
decrease the clusters. Another factor can be if there are changes that are demanded from the
politicians such as new laws and so on. The effect of the changes depends on those internal
mechanisms that kill the external mechanism, when internal groups are not willing to develop
new ideas (Porter, 1998; Porter, 2001). The mature industries are not innovative because they
are not a part of clusters; these kinds of industries are those industries that have dominance
when it comes to mature industries. The mature industries focus on innovation in the
innovation process that goes step by step and they are more focused on or interested in
incremental innovations (Tödtling & Tripl, 2005). A lot of organizations that are large do not
know the value of clusters. Rosenfeld (1997) points out those large companies undermine the
value of sustainable clusters according to Rosenfeld (1997), the point is that clusters are
depending more on small and medium companies than the large companies. To implement
innovation strategy and innovation clusters, the need is to involve the regional actors and
involving public authorities and other actors that are interested in regional development
(Tripl, 2006).
3.6.1 The three barriers of regional innovations strategy

Innovation strategy has three barriers and they are organizational thinness, fragmentation and locking (Doloreux, 2002; Isaksen, 2001; Tödtling & Trippl, 2005). Organizational thinness is about the low employment and lack of actors and knowledge of a region, and to support the learning in the region. Regions with organizational thinness have difficulties to build innovation strategies. Organizational thinness is due to lack of collaborations between universities, entrepreneurs and actors that is a weakness. Why it can be like that is because of lack of networking and there isn’t any development of new technology or new methods to prevent the organizational thinness (Isaksen, 2001; Tödtling & Trippl, 2005). Tödtling and Trippl (2005) are saying that new entrepreneurs aren’t afraid of developing innovation networks, and point out that they are even better.

Organizations that are focused on their own organization just because they are a part of a network that is connected to the innovation strategy, those organizations are locked. If organizations are locked they minimize the way of thinking outside the box and that’s not a good behaviour, this can depend on terms like social and cultural contexts (Isaksen, 2001; Tödtling & Trippl, 2005). Organizations in the context are mature industries that dominate the innovation strategy. These organizations are large organizations and they work with R&D, Research and Development, and work with renewing innovation (incremental innovation). Spreading the knowledge is highly developed in large organizations, that’s because they have more experience than small business (Tödtling & Trippl, 2005). The regions have to adjust the regional problems when it comes to the terms of global economic condition and the technical condition. Politicians should attract and maintain the innovative companies and skilled people. The politics should even improve the infrastructure to develop and strengthen the regional innovation strategy and its network (Isaksen, 2001; Tödtling & Trippl, 2005).

Universities collaborate with industries, organizations, politics and the private sector. The collaboration is a partnership so they can implement a research centre to strengthen the infrastructure and the entrepreneurial activities especially in those fields where activities are low (Tödtling & Trippl, 2005). All organizations with innovation strategy knowledge should present innovation strategy to the entrepreneurs to create business partners and to expand the resources (Capello, 2002; Isaksen, 2001; Tödtling & Trippl, 2005). The knowledge policy has to focus on innovation and renewing the infrastructure so it can work in new fields; like support, technology and more. Knowledge policy is about stimulating the modern technology, it’s about investment and external networks (Capello, 2002; Isaksen, 2001; Tödtling & Trippl,
2005), strengthened innovation strategies are necessary to balance the skills (Isaksen, 2001; Tödtling & Trippl, 2005).

3.6.2 Governance
The politicians that make decisions about regional changes are the actors and they have the role to shape the innovation strategy (Tödtling & Trippl, 2005). It's about having strong regional and political leaders that are committed to developing the innovation strategy (Hassink, 2002). The region is depending on governance budget to gain an innovative resource (Cooke et al., 1997). The governance has power over the region’s independence and they can’t control their own innovation strategy but the region can spend their resources freely (decentralized spending). The central government formed a policy that contained all the regions’ resources except those regions where they can implement their own policies on how to spend their budget in a decentralized way. Those regions that are in charge of their spending have more opportunities to gain innovation and its strategy. The regions with a taxes system are more active regions because the regions will adopt innovation strategy with the taxation and the funding from the government (Cooke, 2001; Cooke et al., 1997).

Countries that are controlled by the government are not effective when it comes to innovation strategy (Cooke et al., 1997); Countries that are small are not in need of regional influence. Countries that are in need of regional influence are large countries (Cooke et al., 1997; Hassink, 2002). The countries that are large have many organizations that are small and medium and they are countries with a strong economy and they are in need of innovation strategy and support (Hassink, 2002). Companies are able to recognize obstacle and opportunities that could come up from nowhere. The companies are able to adopt initiatives, so the companies can gain benefit from it (Porter, 2000).

Top down initiative shows regional structure lacking of resources like subcontractors and operators and they have been operating alone (Fromhold-Eisebith & Eisebith, 2005). Fromhold-Eisebith & Eisebith, (2005) assume that if they mix the two initiatives bottom up and top down together there will be clashes between clusters that are coordinated that would effort in conflicts between the private and the public sector. EuRADA (2011) says the combination of the two initiatives can be a good idea and that will lead to smart specialization that would lower the barriers between companies and universities to collaborate when it comes to researching innovation strategy.
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3.7 Local interactions
The relationship in terms of innovation strategy has to be with the municipality and the region, they will spread the knowledge between organizations and the municipality to gain more engagement (Asheim & Coenen, 2005a; Asheim & Isaksen, 1997; Edquist, 2005), the relationship can generate the value of innovation and economic and it will raise the productivity in the region where they have established innovation strategy, with closer interaction and the quality of the political networks will make a big difference (Capello, 2002; Fritsch, 2002).

The spread of knowledge, increases the collaboration with partners, these partners are organizations, companies and universities (Fritsch, 2002). There is knowledge that is an important resource when it comes to competitive advantage between regions both nationally and internationally; it is inflexible knowledge (Asheim & Coenen, 2005a). Fritsch and Franke (2004) state that there is no evidence that the spread of knowledge has a positive impact on the process of innovation and economic development. But they point out that the spread of knowledge can be significant. Dependence of the knowledge that companies are using is also a knowledge base for the innovation process; according to Asheim and Coenen (2005a; 2005b).

3.7.1 Regional innovation strategy
There are various forms of interactions and these interactions distinguish between three different innovation strategies (Asheim & Coenen, 2005a; Asheim & Isaksen, 2002). The first which belongs to the innovation strategy, are companies that base their businesses on the social and cultural proximity and foremost to stimulate the local learning process, for which not much interaction with the knowledge organizations is necessary to conduct their innovation activities (Asheim & Isaksen, 2002). Synthetic knowledge takes the help of research institutes to some degree as we have mentioned previously that synthetic knowledge is product based. Then we have the supporting infrastructure, which counteracts obstacles and has more of an analytical character and belongs to the innovation strategy in an ideal form. It relies more on the analytical knowledge base research which will form the foundation for the scientific arguments for innovation strategy (Asheim & Coenen, 2005a; Asheim & Isaksen, 2002).
This chapter describes how Sweden works with innovation strategy as well as the success they have had in terms of innovation strategy. Innovation is the key to Sweden's future competitiveness and prosperity.

4.1 The Swedish innovation strategy

Swedish innovation capacity has focused on the regional innovation strategy work. The project also conducted thirteen regional meetings where between 30 and 50 percent of the participants came from the private sector (IVA, 2013).

Innovation strategy is dependent on the public sector; actors in the public sector are divided into four different areas (see Figure 7). At the overall level are the Parliament, Government, Departments, Municipal and Regional Decisions congregations. The second category is the Financing and the development support, The Research Council, and Authorities with innovation assignments, there are different actors included, see Figure 7. The third category is R&D-implementers; in this category are the Universities and Colleges, and Industrial research institutes. The last category is Commercialization and Entrepreneurship; in this category are
Swedish innovation strategy

Business Sweden, Tillväxtverket (The Swedish Agency for Economic and Regional Growth) and Almi.

4.2 Regional innovation capacity

Swedish innovation capacity has mapped the work of regional innovation policies and regional innovation strategy in Sweden all regions. The documentation consists of written documents and plans, summaries of the project’s thirteen regional meetings and interviews with those responsible for the innovation strategy work in all of Sweden's counties and regions. Seven counties and regions have presented innovation strategies. Another six presented their strategies in autumn 2013 and 2014. Regions prioritise actions and programs in the field of innovation and research environments (such as incubators, science parks). The next most common strategies are measures for more effective support systems and infrastructure. Regions that are areas of strength have also been mapped (IVA, 2013).

Swedish innovations have success factors in the work to implement an innovation strategy; sixteen factors are highlighted including strong leadership, shared vision, goals and clear process. The activities of the private and public sectors are at the center and the need for action plans with clear responsibilities. The Regions' expectation of national support is not only about money. Regional dialogue, open innovation and innovation in the public sector are all areas where the spread of knowledge and arenas for the exchange of experiences are seen as key national tasks. Of high priority is also making efforts to improve the utilization of research and support system structure (IVA, 2013).

4.3 Innovation actors

4.3.1 Almi

Almi's vision is to create opportunities for all viable ideas and businesses to develop. Almi offers counselling, loans and venture capital in entrepreneurship at all stages – from ideas to successful businesses. It covers both ideas with growth potential in the early stages as well as existing companies investing in growth and expansion. Almi is owned by the Swedish state and is the parent company of a group with 16 regional subsidises, Almi Invest AB and IFS Counselling AB. Almi is close to the customers with 40 offices across the country. Operations are organised in three business areas; counselling, loans and venture capital (Almi).

Loans

Almi supplements the market by offering risk-bearing loans when no one else does. Almi's role is to take a little more risk. Viability of the idea and its future potential has greater
significance than real assets. Important is also the entrepreneur’s and the company’s ability to develop and utilize the idea or investment. To compensate for the higher risk and to not compete with the private market Almi charges an interest rate that is above the average bank interest rates. Lending is often done in collaboration with other lenders and the banks are important partners. Almi Business Loans are aimed at companies with up to 250 employees in all industries. Micro loans are for companies with smaller capital needs, mainly new enterprises that have difficulties to get capital needs covered elsewhere. Almi also offers financing to companies in need of capital in connection with an export drive, and specially adapted financing for the development of innovation projects (Almi).

**Venture capital**

Almi Invest is the group's venture capital company. The role is to be complimentary to the market and to invest where the risk is high and the supply of capital is scarce. Almi Invest invests in companies with scalable business ideas and opportunities for long-term growth. The companies should have the ability to compete both nationally and internationally and there must be a clear customer need. Management shall consist of motivated entrepreneurs or teams with the ability to build successful companies. Investments are made from seed to expansion. With seed, Almi aims for the start-ups and emerging businesses in the very early stages. With expansion, Almi aims for companies that are already on the market and are in the early stages of an expansion or growth (Almi).

**Advice**

Counselling is conducted by Almi's adviser or by external consultants. The point is that customers will be offered the best possible service and expertise based on their needs. Based on regional conditions and according to the regional Almi Company’s own resources, offers vary from region to region. Through Almi's growth counselling the companies get access to experienced advisors and proven leadership- and business development programs. Through Almi, a protégé gets access to a mentor who volunteers. Every year between fifteen hundred and two thousand mentoring pairs are matched in the two mentoring programs: Mentor Starting Businesses and Mentor Developing Businesses. Innovation consulting is for unique ideas that are new or significantly improved over the solutions available on the market today and that have business potential. Almi provides support from experienced advisors with contacts, financial tools and proven project models. New Business Counselling is aimed at people who are about to become entrepreneurs. A part of that operation is IFS Counselling.
Swedish innovation strategy

that caters to entrepreneurs with a foreign background. Almi has extensive seminar activities in different areas of entrepreneurship (Almi).

**Incubation**

From January 1, 2015, all Almi's activities in the incubator support and incubation has moved to VINNOVA. Almi will continue to focus efforts directly towards entrepreneurs and businesses with counselling and financing through loans and equity contributions (Almi).

### 4.3.2 Business Sweden

Business Sweden makes it easier for Swedish companies to grow internationally and for foreign companies to invest in Sweden. Business Sweden has offices in nearly 60 countries and in every region of Sweden, strengthens our country as an attractive, innovative and competitive business partner. An important part of Business Sweden's mission is to simplify for Swedish small and medium businesses to reach out with their products and services so that they can grow internationally. The support is done through counselling, training, events and target investments. Business Sweden is owned by the government and industry, represented by the Ministry of Foreign Affairs and the Swedish Foreign Trade Association. The shared ownership provides access to contacts and networks at all levels (Business Sweden).

### 4.3.3 Tillväxtverket

The Swedish Agency for Economic and Regional Growth (Tillväxtverket) is an agency that works to support businesses and regions to develop and become innovative. Tillväxtverket is engaged in development, financing and collaboration and want their business to spread the knowledge of the development of entrepreneurship to create a more sustainable Sweden with growth that is increasing (Tillväxtverket).

### 4.3.4 VINNOVA

VINNOVA, Swedish Agency for Innovation Systems, is a government agency that falls under the Ministry of Enterprise, Energy and Communications. VINNOVA will work to create growth in Sweden and cooperate internationally. The organization has great focus on technology areas. VINNOVA’s vision is that "Sweden will be a world-leading research and innovation country that is attractive to invest and conduct business in" and their task is to create synergy in business and the public sector. VINNOVA is investing about 2.7 billion SEK in research and development each year (VINNOVA).
5

Sörmland innovation strategy

5.1 Vision for Sörmland strategy
The innovation strategy is the vision in Sörmland Regional Development Strategy 2020. The strategy has its origins in what is identified as important locally and regionally in the Sörmland region. Those who are included in the vision are organizations, private and public sector they are parts of the Sörmland’s innovation strategy whose aim is new development. This is achieved through a strong and open innovation culture that includes, supports and creates opportunities for all kinds of ideas, people and entrepreneurs who have the potential and drive; it should be easy to realise dreams, ambitions and ideas in Sörmland (Regionförbundet Sörmland, 2014).

5.2 Why innovation strategy in Sörmland
In Sörmland Regional Development Strategy 2020 is a competitive industry one of four priority goals. A strong economy and a high degree of innovation and renewable are described as key issues for sustainable economic growth and increased employment. One way to achieve the goal is to develop the regional innovation strategy. Innovation is also a tool for achieving the other goals in Sörmland Regional Strategy 2020:

- In Sörmland there are good prospects for young people and adults to train and work. Employers have good opportunities to recruit people with the right skills.
- Sörmland has strong links with the outside world.
- Sörmland has durable and attractive living conditions (Regionförbundet Sörmland, 2014, p. 7).

Researchers have conducted a situation analysis and the answer was that there is need for more innovation. The project is a part of the innovation engine and pointed to the need for a regional approach. Clearer regional leadership was necessary in order to drive innovation and to intensify efforts in the region. A visualisation of the entire regional innovation strategy would make it easier for innovators and operators to find the right ideas and guide the ideas on the right track. Stakeholders involved in the regional innovation support system have also requested the need for joint objectives to develop innovation strategies. All municipalities in the region have a common goal, the goal is important to efficiently utilize the region’s limited
Sörmland innovation strategy

development resources by all municipalities in the region in cooperating with each other in terms of knowledge sharing, monitoring efforts and facilitating support for people with ideas so they can find the right way to the innovation support system. A regional innovation strategy for Sörmland is to strengthen the structures and the tools that have been built up under the Innovation Engine and to pair it with other innovation initiatives both inside and outside the region. To concentrate efforts on innovation in Sörmland is also a clear signal of the Swedish national innovation strategy launched in autumn 2012. At the EU level, the new innovation policy is about smart specialisation, that is to identify the region’s most important assets and the focus is to increase competitiveness. A regional innovation strategy is needed not only for the renewable of the business sector and more public or private investment in the region, it can also serve as a tool to solve societal challenges such as integration, gender equality, environment and health (Regionförbundet Sörmland, 2014).

5.2.1 Priority target areas
Sörmland continues to invest broadly and chooses to prioritise the tools rather than the industries, not least because of the region's size and structure. Another reason is that many ideas do not come from environments that are linked to traditional research. Some specific areas of development have not been identified, but the tools can be used in the future in the areas of strength or industries, which are regarded as strategically important in the context of the work on a smart specialization. With the help of the regional innovation strategy, Sörmland can meet global societal challenges, creating competitiveness and jobs in a global knowledge economy and deliver public services with improved quality and efficiency (Regionförbundet Sörmland, 2014). Sörmland has identified four main areas that the region works with:

1. The idea career is in the center
   - The idea career is a good understanding of how ideas/innovations can be realised and what support is available in the innovation support system. The idea career is involved in the design of the intervention.
   - New groups outside innovation strategy such as young people, people with foreign backgrounds and people with ideas in municipalities without their own business, are reached by intervention.
   - Increased growth and other improvements are measured for those who take part of the innovation support system. It's about the individuals who are out of work and receive living expenses from social assistance.
Sörmland innovation strategy

2. **Strong and open innovation culture**
   - Young people’s power of innovation is utilized.
   - All organizations are aware of their function in the innovation system of support; they trust each other and work together.
   - The link between academy, the research and innovation support system, and the business community is strengthened and linked with the outside world.
   - Sörmland is known to use the best practices and approaches.

3. **Innovation in existing companies and the increased commercialising**
   - Existing companies use innovation for increased growth and competitiveness.
   - Internationalising for innovators and businesses are facilitated.
   - Possibilities for financing and business development at different stages of the innovation process and for different types of ideas/innovations are developed.

4. **Innovation in the public sector**
   - The public sector works with various tools to promote innovation for solving societal challenges and contributing to society.

5.3 **Implementation of the strategy**
Sörmland Strategy 2020 will help to concretize and break down the overall goals. Sörmland has an annual action plan worked out that follows the structure of the target areas. The expectations of stakeholders, funding for operations and various tools such as open innovation, innovation and leadership are clarified Sörmland Regional Strategy approach with its four tools: analysis, projects, meeting places and follow up is a support in the implementation process. Communication is an important instrument that permeates all four tools (Regionförbundet Sörmland, 2014).

5.3.1 **Analysis**
Analysis is an important basis for decision-making on various projects and activities. It is also a good tool for monitoring Sörmland’s joint efforts. Analyzes carried out to develop the innovation strategy are Innovation Index Sörmland, actor mapping, a final evaluation of the project More Innovations Simply, as well as, a thematic evaluation of innovations linked to Sörmland Strategy 2020. The innovation index is also an important measure for understanding the conditions for innovation to come. Suggestions for future analyses are to conduct a comprehensive needs analysis to find out the various target groups’ need for support (Regionförbundet Sörmland, 2014).
Sörmland innovation strategy

5.3.2 Project
Working in projects is an important tool to drive development. It should be clear what needs the project analyses and how it contributes to achieving the objectives of Sörmland Strategy 2020 and Sörmland’s innovation strategy. A key requirement in achieving a long-term result in innovation strategy has to be active ownership and the main focus of innovation strategy is on learning by following up the results. Co-production of projects can strengthen the ties between actors in the support system, different sectors and municipalities. The cooperation between municipalities and the actors in the support system shall be a clear cooperation between them and accessibility of different audiences. Higher counterclaims must be imposed on actors who wish to participate in the projects, such as declarations of intent for the people with idea (Regionförbundet Sörmland, 2014).

5.3.3 Meeting places
The fact that people meet and new partnerships are created is an important prioritised for innovation to occur. Arranging meeting places creates opportunities for cross-fertilization between industry, academia, government and society. Meeting places and overall networks between actors in the system are also important, for example, to foster interactions between actors. Within the framework of the implementation of the strategy is organized both outreach meeting places for the benefit of innovators and venues that aim of developing the system. Annually, there are two major meeting places for disseminating knowledge and providing opportunities for networking, for both innovators and actors in the system. One of the meeting places is turned to actors in the innovation support system to achieve increased confidence, learning and cooperation between actors (Regionförbundet Sörmland, 2014).

5.3.3.1 Follow up
In order to follow development regarding the conditions for innovation, the innovation index is a good measure, which also appears in Sörmland Strategy 2020. Sörmland’s joint operations and their outcomes need to be followed up in joint financial statements which are activity reports for Sörmland’s "basic service". The common indicators for these statements need to be developed. If there is a specific project supposed to be launched, the project requires a specific follow up. Those who are following the project, should take into consideration that the project makes use of the joint financial statements for Sörmland’s strategy (Regionförbundet Sörmland, 2014).

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Sörmland innovation strategy

5.4 Implementation of organization

5.4.1 The strategic leadership
The Regional Council will coordinate and monitor the implementation of the regional innovation strategy. In order to ensure implementation and continual learning and assessment, it is required to form a development group composed of key actors and finances in the innovation support system from the private and public sectors, and from academic and low profile sectors. The group's task is to actively monitor development in the field of innovation in general and take part in follow ups of the efforts being made within the strategy. The group has decided on joint actions on the basis of the strategy and meets 2-3 times per year. The Regional Council is arranging. National actors can be supportive and give feedback within the strategic leadership (Regionförbundet Sörmland, 2014).

5.4.2 Operational leadership
Sörmland’s regional actors are responsible for a regional basic service like innovation consultancy; the Regional Council obtains innovation competitions, large meeting places and more. Operators that include innovation nodes, corporate and innovation advisors, entrepreneurial/professional associations, Science Parks/incubators, universities and public organizations can also take the initiative to projects that meet the objectives of the innovation strategy. For idea careers the help available also consists of support and input from stakeholders at the national level. The innovation nodes have an important role to lead efforts locally, tie together actors in the node towards the idea carrier and be a link to the municipalities that lack their own node operation. If necessary, working groups that are action oriented and as such can be organized by sector or around an area that focuses on internationalization or business/finance are started. The working groups’ task is to actively develop the operational activities, for example by arranging meeting places where participants have the opportunity for exchanging experiences and learning. The groups shall coordinate the efforts of the region as decided by the development team (Regionförbundet Sörmland, 2014).

The wheel of the year for implementation of the innovation strategy
The figure below shows how Sörmland is working to establish an annual action plan. In order to better prepare annual action plans a year wheel has been prepared which contains parts of the Sörmland Strategy tools and also reflects the organization of the implementation of the county innovation performance. This is how Sörmland works with innovation strategy; every region in Sörmland has their innovation strategy (Regionförbundet Sörmland, 2014).
Figure 8 The wheel of the year for implementation of the innovation strategy; (Regionförbundet Sörmland, 2014, page 13). Translated from Swedish to English
Who are the Kurdish people

6

Who are the Kurdish people

This is a brief section with facts about Kurdish history and the situation of the Kurds; the researcher will make it clear for the readers who the Kurds are. The researcher won’t go into every detail because it’s very complicated and in that case the researcher would have to write a novel about Kurdish history.

Where do the Kurds come from? Kurds belong to the Indo-European group and are related to the Persians. Going far back in pre-history the land of the Kurds was called Mitanni, Kassites and Hourites in the mountain areas. The land of the Kurds is situated between the river Euphrates and the Iranian plateau. “In VII BC, the Medes, the Kurds’ equivalent of the Gaul’s for the French, founded an empire which, in 612 BC, conquered the powerful Assyria and spread its domination through the whole of Iran as well as central Anatolia” (Kendal, page 1). The Kurdish year is different from other countries’ years; the year 612 BC is the beginning of the first Kurdish year. In present time it is 2715.

The rule of the Medes ended at the 6 BC, but the Medes religion and civilization dominated in Persia. The religion of Medes and civilization ended when Alexander the Great conquered the Middle East. The Kurds were called Karduchoi by the Greeks and the geographers (Kendal).

When the Arab-Muslim invasions started the Kurds joined the Arab-Muslim invasion, and that’s how Kurds became united with Arabs. The Kurdish resistance and the Arabs fought for centuries, even in present time the Arabs won’t accept Kurds as Kurds. “The Kurdish tribes resisted the Arab tribes for social rather than religious reasons. All methods were used to coax the Kurds and convert them to Islam, even, for example, the matrimonial strategy, the mother of the last Omayyad caliph, Marwan Hakim, was Kurdish” (Kendal, page 1).

“The 1920 Treaty of Sevres, which created the modern states of Iraq, Syria and Kuwait, was to have included the possibility of a Kurdish state in the region. However, it was never implemented. After the overthrow of the Turkish monarchy by Kemal Ataturk, Turkey, Iran and Iraq each agreed not to recognize an independent Kurdish state” (Washington Post, 1999, page 1).
Who are the Kurdish people

- Iraqi Kurdistan was under British mandate, 1919, 1923 and 1932 the Kurds start their revolt against British mandate but the Kurds were crushed.
- 1945 Mela Mustafa Barzani started KDP or in Kurdish, PDK (Kurdistan Democratic Party or in Kurdish Partya Demoqrati ya Kurdistan e). Barzani started his revolt against Iraq.
- Kurdistan was granted self-rule and language rights, the deal was repealed over oil revenues in 1970.
- New conflicts exploded between Kurds and Iraq the Kurds were backed up by Irani in 1974. But Iran withdraws from supporting the Kurds the following year.
- A mustard gas attack was launched on Kurdish city Halabja 16 mars 1988 and Saddam ordered the attack, killing more than 5 000 Kurds and many more injured.
- 1991 the Iraqi Kurdistan comes under international protection after the Gulf war where Kurdish Peshmarge forces had a big rule (Washington Post 1999).

6.1 Duhok region

Duhok is the capital of Duhok Governorate in Kurdistan, which is a federal part of Iraqi Kurdistan. Duhok region is located far up in the northwestern part of Iraqi Kurdistan and forms the western region of Iraqi Kurdistan. Duhok is and has been a strategic region through history to the present. The city of Duhok has been a contentious war zone between the ancient Kurtians (Gutians) and the Assyrian state in Nineveh and Mitanni Kingdoms. Later Duhok became an Assyrian town named Beth Nohadra or Naarda, where it became a part of the metropolitan area of Ḥadyab (Hadyab is known as Hewler, or Erbil, the capital city of Iraqi Kurdistan). The city became liberated from Assyrians in 1236 when Hassan Bag Seyfaddin joined Duhok with the Kurdish Bahdinan Empire. The Ottomans disbanded Hassan Bag Seyfaddin’s government in 1842 and Duhok was re-connected, this time to Mosul. Mosul is Iraq’s second largest city. During the Ottoman rule, in 1894, there were eleven private schools, two schools for Jews and two for Christians and seven for Muslims in Duhok. 26 years later, in 1920, there were five primary schools for girls throughout Iraq and one of the schools were in Duhok (General Direction of tourism/Duhok, a).

Duhok region has a strategic localisation because it is considered a point in common between three countries in Kurdistan (Iraq, Syria and Turkey). Duhok region lies between wavy high mountains. The shape of Duhok region is an irregular rectangle and longitude is between two lines of latitude (36. 40) and (37. 20) degrees to the north, so it places north of the equator in the northern equinoctial zone. Duhok region is considered one of the most significant and
Who are the Kurdish people

important regions and Duhok has a border with Turkey and that is the way to other European countries (General Direction of tourism/Duhok, c).

Duhok region is famous for its diverse topography consisting of very high, rough and complex mountains that form the political border with the Republic of Turkey beside the extended plains enriched with agricultural resources that form the southern part of the provinces. Because of the nonexistence of accurate records at present, the Directorate of Counting and Registration depended on the old records and put rate increases in the population to them. Duhok region has seven municipalities; see below in Figure 10 (General Direction of tourism/Duhok, a).

About the Federal region of Kurdistan in Iraq: “The people living in the Kurdistan Region are Kurds as well as Assyrians, Chaldeans, Turkmen, Armenians and Arabs. The Region has a young and growing population, with 36% aged 0-14 years, and only 4% aged over 63. The median age in Kurdistan is just over 20, meaning more than 50% are less than 20” (General Direction of tourism/Duhok, b). The Kurds have lived in villages and their survival methods were agriculture and taking care of animals, sheep, goats and cows, this was because of their fertile land. But like other countries, the trend has reversed, and most residents live and work in the urban regions of Duhok, Hewler (Erbil) and Silemanye. Residents are working with construction, commerce and with the government; these are the most common jobs (General Direction of tourism/Duhok, b).
Who are the Kurdish people

The figure above is showing the three regions of Kurdistan in Iraq. Duhok region has a population of 1.3 million citizens divided in seven municipalities. The municipalities are Amediye, Zaxo, Duhok, Sêmêl, Akrê, Berdereş and Sêxan.
6.2 The Budget crisis
The Kurdistan region wanted to sell their own crude oil on their own terms and that’s where the financial crisis began, by cutting off the Kurdistan budget (Reuters). The government of Iraq has cut off the Iraqi Kurdistan’s share of the budget since January 2014. The issue started when Kurdistan federal region Iraq found oil fields in the autonomous Kurdistan. Former Prime minister Nuri Maliki took action in his own hands because of the oil policy that was made before finding the oil fields in the Kurdistan region. According to Rudaw news agency, the Iraqi government wanted to put pressure on the Kurdistan government not to sell the oil by a new pipeline, the Iraqi government wanted that Iraq's State Oil Marketing Organization, SOMO, should sell the oil through their pipeline (Rudaw).

The agreement that the Kurdish and the Iraqi government made was that the Kurdish region is going to deliver 550 000 barrels per day (bpd) in 2015 to SOMO in exchange for 17 percent of the budget (Rudaw). From this year the Kurdish government would get 105 billions dollars for the whole year with a monthly payment of 1 billion dollars. “Under the deal, 300,000 barrels per day (bpd) of oil from Kirkuk will be exported via a pipeline running through Kurdish territory to Turkey, in addition to 250,000 bpd from the region's own fields” (Reuters). The Iraqi government wants to sell the crude oil through their organization SOMO as mentioned above, and they want the Kurds to be dependent on them.

6.2.1 More resources
The researcher made a phone call to a finance minister in Kurdistan region to clarify the Kurdish budget question. This respondent won’t be represented in the empirical result because the researcher just wanted to clarify the Kurdish budget question. Because the News agencies write differently, the researcher wanted to have information from someone who is sitting in the negotiations with the Iraqi government. According to the finance minister, the agreement for the oil policy was made before the Iraqi or the Kurdish governments knew that there were oil fields in the autonomous region in Kurdistan. What the Iraqi government wants is that the Kurdistan region will be dependent on the Iraqi government according to the minister. The researcher’s theory is that the Kurdish government made a policy for the foreign investors, to invest in Kurdistan region of Iraq. The policy was a success and the former Prime Minister who led the government was not happy about the result that was a success for the Kurdistan region, the finance minister pointed out. The Iraqi people complained about the Iraqi government because the government has not gone the same route as the Kurdish region of Iraq. It can be one of the reasons that all foreign investors turned to Kurdistan and that

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Who are the Kurdish people

country after country open their consulates in the Kurdish region and signed of contracts for development in the Kurdistan region according to the finance minister.
Empirical result

7

Empirical result

Before we go in to the empirical result, the researcher want to say something about the persons that the researcher has been interviewing. A lot of them are willing to work with innovation and want to develop the region, but there are always barriers and in the process everything stops. The researcher asked them why the process stops, and the answer is that the budget or the people who are in charge are not interested in innovation and they think that innovation is not a good solution. To make it easier for the researcher the three first questions were very simple and open questions. The thoughts behind those questions were to open their minds and to make it comfortable for the persons who got interviewed. In the empirical result chapter, there are some questions that are enrolled in the chapter these questions are follow-up question which some of those interviewed have received the questions.

This table below shows the persons that were interviewed for the research. The status of R1 and R2 is not mentioned because they wanted to be anonymous.

<table>
<thead>
<tr>
<th>Table 1 Persons that were interviewed.</th>
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<tbody>
<tr>
<td>PhD 1</td>
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<tr>
<td>PhD 2</td>
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<tr>
<td>Ayad Jaleel</td>
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<tr>
<td>Kovan</td>
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<tr>
<td>Evin Abdul-Rahman Bamerni; PhD</td>
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<tr>
<td>Zirak Ahmed Ismael</td>
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<tr>
<td>Politician</td>
</tr>
<tr>
<td>Manager</td>
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<tr>
<td>Respondent 1</td>
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<td>Respondent 3</td>
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<td>Respondent 4</td>
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7.1 Interviews

All persons who were interviewed answered the question one to three almost identically; except for the politician; the politician had other questions. Those who were interviewed had different experiences. As a researcher, I thought that some would not have a clue what
innovation was. Innovation is about developing new ideas in the daily work and is able to develop growth in the region. Innovation is something that is needed in people’s lives when it is new and useful. Innovation is a key factor for the people of the Middle East, because the Middle East is lagging behind with development and developing a strategy that is linked to innovation. People who have the strength to work with innovation and are for changes are not taken care of by the governments according to the interview persons. Most of the people sitting in the government are elderly and they don’t like changes, they will do everything they can to put up a barrier to stop innovation drivers, describe the interview persons.

The first meeting was with two PhD’s. One of the PhD’s (PhD1) has been examined in Malaysia 2012 and the thesis title is: *The influence of organizational culture, innovation drivers, and information technology capability on innovation capability of manufacturing firms in Iraq*. He talked about innovation as big thing, and the people are aware of that they are in need of innovation strategy but no one wants to take the responsibility to spread the innovation knowledge. He also explained that the elder that are in charge is like a barrier for the changing opportunities he even explained that the industry in Kurdistan in general are after when it’s come to innovation strategy and innovation thought’s. PhD 1 said that “they are working just for the money; they do what they should do because there is no pattern that they can follow”. PhD1 explained that there is a barrier that stops all peoples with new ideas because there is no one that backs them up and gives them feedback for things they do or guides the persons on the right track. PhD2, who has written an article with PhD1, the article is *Evaluate the standard of innovative behavior in Kurdistan region ministry*, also said the same thing about knowledge and spreading of the ideas. PhD2 had an example that was related to him, because this happened to him in real life. The example was he had research about innovation and wanted to send it to an organization near Bagdad for their opinion; the staff at the university couldn’t help him. He did everything on his own cost and on his spare time. He said this to mark that the elder that are in charge are not willing to change the way they work, work at the organizations or universities are related to the 1950`s and 1960`s level.

Both PhD’s agree that the Duhok region is developing but very slow and they are aware of if the region is going to survive, the people need to change the way they think and implement innovation thoughts instead of just doing as they do every day and every year. Respondent 1 (R1) pointed out that his organization has an innovation strategy but they never use it.
Empirical result

The researcher then asked specifically (TR): How come you never use the innovation strategy, and if not, why not use the innovation strategy? Does that mean that you don’t have innovation strategy in Duhok region?

“No one cares, and no one wants to take the responsibility in implementing the innovation strategy, this is because of those who are in charge they only look for what is best for them they don’t look for what is best for the Duhok region” said R1. Respondent 2 (R2) pointed out that development is better in Hewler, the capital city of Kurdistan, and in the region of Silemaniye.

TR: Why is it like that, Duhok region is a large region and they are near the Turkish border. Duhok needs to develop an innovation strategy, isn’t that right?

R2 answered and said, “yes I agree, but no one cares apparently, there have been a lot of projects that were supposed to be done in Duhok, none of them are in progress, and the only thing that is in progress is building houses”. R2 blames those people in charge of development in Duhok region. R2 also said, “After the election there would have been changes because a new governor was elected and the first thing he was going to do was to build a strategy for Duhok’s development”.

TR: What kind of development was it?

R2 pointed out that the governor of Duhok region is an educated person and that he is aware of innovation, as a process, but R2 said “I can’t say if it was innovation strategy, what we can say about the situation right now is that everything is upside down when Mosul was captured by IS (Daish) and the refugees are finding shelter in Kurdistan, especially in Duhok region. All the projects were cancelled after the Iraqi government stopped paying to Kurdistan the planed budget and the workers salary”. Everything was cut off from the Iraqi government ruled by Prime Minister Nuri Maliki, R2 pointed out.

One of the interviews took place at Duhok’s Chambers of Commerce & Industry with the manager of the Chamber. A person with future thoughts, the first thing he said was “I’m surprised that an educated Kurd comes to Kurdistan and is researching about innovation strategy in Duhok region”. The manager was aware of innovation and said “but we can’t compare us to Sweden and their development, we need help”.

TR: What kind of help is it that your organization needs?
Empirical result

The manager said “we need more knowledge in innovation, in innovation clusters and in innovation strategy. To be honest, we are far behind when it comes to development and building an innovation strategy with a strong innovation process”. Instead of answering the researcher questions, the manager mostly asked for help and advice on how they can develop the region as Sweden has. The manager even pointed out that Sweden is the foremost country in Europe for their innovation strategy and their process, “I’ve done my research”. The manager said “we the Kurdish people are a country in another country but we are a part of Iraq, and we are more developed then Iraq”. The manager pointed out again that they need help. The Iraqi part of Kurdistan wants to develop their service innovation so they can handle the innovation strategy. The manager of the Chamber of Commerce & Industry said “to develop a developing state there needs to be a long process of learning and educating methods especially in innovation and how to use innovation in our work process”.

Another interview took place at the researcher’s relative’s house, with Respondent 3 (R3), Respondent 4 (R4) and one government politician (P). That interview became a huge argumentation thanks to R4; the argumentation was about innovation, innovation strategy and globalization. The Politician argued that innovation would be implemented but not now. TR: “Why not?” The answer from P was that some of the politicians who are sitting in high positions are former conservative Baath party members and they are sitting on those positions only for the money. TR: ”So you are saying that they are the barrier?” P replied: “Yes they are the ones who are preventing everything, especially development in Kurdistan”.

R3 suggested that Duhok region is in need of developing their innovation strategy to be a part of the globalized economy. “At the moment we are at war with Daish (IS) and we are fighting for the whole world and we hope after retaking our territory everything is going back to normal,” said R3. P and R3 also explained that Kurdistan is not ready to join the globalized economy but Kurdistan is depended on it because they import more than they export, the things they export are nature resources. “Duhok region and Kurdistan need to improve their innovation strategy and should specialize, in all fields; product innovation, process innovation, service innovation and other fields”, said R3, “we need all kinds of innovation organization to build our region to a better region”. P said, “according to a meeting with all Kurdish Parliament members where the discussion about globalization was on the agenda, all Parliament members agreed that Kurdistan is getting more and more globalized because of all foreign consulates in Hewler (Erbil) the capital city of Kurdistan and the foreign investors.” P pointed out that the parliament has not had an agenda for innovation, but the parliament
Empirical result

discussed a lot about development projects and investments for developing the Kurdish region as a whole. Two important questions that the researcher asked P in the interview were *Have parliament talked about innovation strategy for Kurdistan in general? Does the government have a budget plan for innovation strategy?* See Appendix II. P answered the questions. There was a thought about innovation, but the thought was not one hundred percent. It may be that the parliamentary members are not knowledgeable in the field of innovation that could be why the parliament has not talked about innovation. Regarding the budget question, how do parliamentarians put up a budget for innovation or innovation strategy when innovation is not on the agenda in parliament?

The researcher had an interview with a tutor at the Cihan University; his name is Zirak Ahmed Ismael, he took his Master degree in UK. Zirak is a person with ambitions. Zirak starts a discussion about development. The countries that are developed use innovation to ensure not to fall behind. The developed countries have a strategy; they are constantly renewing their strategies. These countries are even developing new products and services, while the Middle East don’t have the same mindset. Kurdistan and its regions have a strategy but “it is not fully developed if we are going to compare with the Swedish innovation strategy” said Zirak, “when it comes to innovation, the people don’t put great emphasis on it because they do not have any organizations or governmental organization that work with innovation”. There should be an innovation center where one could turn for help in working with innovation. There must be an advisor, incubators and courses in innovation, there are not many people who place great emphasis on innovation because there is no help available at all, Zirak pointed out.

For innovation to be accepted the government must discuss innovation strategy as an important development for Kurdistan. The Government must accept the innovation strategy then implement innovation strategy in all regions, proposes Zirak. He thinks that all the regions should work with innovation and development, but it's a shame that all in high positions or governmental organizations are elderly people; they don’t have experience in innovation and innovation strategy, Zirak pointed out. For innovation to be accepted there must be an understanding of what innovation is, or how the strategy works. Many of the elderly are not highly educated and they are competing against the younger generation by pushing down on the younger generation, because the elderly are in charge of the organizations, according to Zirak.
Empirical result

The researcher asked Zirak if the universities have experience in working with innovation. Zirak said, “No, all the universities in Kurdistan are quite young”. Zirak pointed out that the universities do not have experience in working with innovation. Zirak said, “To be able to handle an innovation strategy we need educated and experienced persons to guide the universities”. The universities in Duhok have research departments; those who are doing research are doing it for graduating purposes, particularly for the PhD dissertations according to Zirak. As PhD1 said “the thesis ends up on the shelf and collects dust”. The scientists, who are researching about development, should after graduation continue working with development, for example innovation and innovation strategy instead of putting it on ice and working with something else” said Zirak.

Zirak clarified that Duhok region and universities in Duhok are more oriented towards service innovation, when it comes to product or process innovation. Duhok region and the universities in Duhok do not have that opportunity to work with product or process innovations because it does not have that capacity to work after. The universities have provided suggestions for development to municipality and to the government. But these suggestions do not come from the students in the universities; the proposals come from the PhD's and other lecturers at master level. Zirak think they should let the students also get suggestions for both municipalities and to the government regarding development because students are the future developers. Zirak points out that there is no innovation center or research center in Duhok or in Kurdistan (like VINNOVA and research institutes). “This is 2014 and we still do not have organizations that work with innovation and that is a shame that we do not have begun with the innovation strategy and started a governmental innovation center”, said Zirak.

Cooperation between universities in Duhok regarding innovation questions or to set up an innovation strategy does not exist, according to Zirak. “Cihan University has always had a desire to be able to implement innovation at our University”, said Zirak. The Universities would prefer to bind contact with universities outside the Middle East. For example, Mälardalen University is studying and working with innovation, and has guidelines for educating students while contributing to the growth of businesses, municipalities and developing the region's strategy, described Zirak.

“Cihan University could learn a lot about innovation; the university could visit Mälardalen University to see how they work with innovation and other areas,” said Zirak. “Then, afterwards, Mälardalen University could visit us to see how we work at Cihan University and...”
other universities in the region” assumed Zirak. Without hesitation, Zirak explained that we need to collaborate with other universities in Kurdistan and even in Sweden. “If universities in Duhok collaborates with universities working with innovation, and has worked with innovation a while, they would be able to help us to implement innovation at the universities as well as help us develop the region's innovation strategy that I have already answered before” said Zirak.

TR: *Would you like to have an innovation cluster where different organizations get together to implement innovation strategy?*

Zirak is for having a cluster, but it is not the right time because there are many obstacles that will put a stop to a cluster or an innovation center, as mentioned earlier, the elderly in power or in different organizations are the main problem. Zirak pointed out that they are at war against Daish (IS), but the main problem is the Iraqi government that has cut away the Kurdistan budget.

TR: *Why it is not suitable and what kind of problem would it be as you mention?*

Zirak pointed out that at the same moment we are sitting here and discussing this “there is a war going on between Kurdistan and the IS (Islamic State) and Kurdistan’s budget had been cut away from the Iraqi government when the former Prime Minister Nuri Maliki was in charge”. The Kurdish government is still solving that problem and all these refugees that came to Kurdistan, they are from Iraq and Syria. There are about 1 900 000 refugees in the Kurdistan region who all need shelter and accommodations, they need food, water, electricity and more, according to Zirak.

TR: *To implement a cluster or to implement a new innovation strategy from the start that won’t happen over a day or weeks or months [...] this war will not be going on for all eternity and the refugees will not remain eternally.*

“That’s the problem with us, we are close-minded. We haven’t learned to think outside the box, the only thing we look at is what’s happening now and what’s going to happen later on after a month and sometimes a year, that’s it”, said Zirak.

Evin Khalid Abdul-Rahman Bamerni is a PhD professor that was interviewed and works at the college of law at the University of Duhok. Her knowledge is constitutional law and human rights, she is lecturing in constitutional law and protocol system at the college of law.
Empirical result

PhD Evin assumed that Innovation is when you collect a lot of ideas that are connected to different kind of works rather if it is product or service innovation, “but we don’t have that knowledge and I’m sure that we need to start thinking about innovation more and starting to implement a strategy”.

Evin pointed out that working with innovation, it’s up to the people to decide if the people are going to work with innovation or not. “The people need to work with innovation and I don’t think that anyone can stop us from working with innovation”, Evin said, “they are missing a research institute who could give proposals about researching for product or service innovation”. Evin is aware of that they don’t have an innovation strategy and she thinks that’s one of their big problems for Duhok region not have an innovation strategy. Duhok region is missing a vision and that’s why the region and the people are close-minded and does not think about the future, but more on what is happening in the present. Evin pointed out that the region has a research department and the department is directed towards the planning department when it comes to infrastructures as well as in other areas. “It has started to come up more and more innovation and we do everything in order to develop the universities to become more independent of working with innovation”, said Evin.

Evin pointed out that the university has a department that can work with researching about innovation. Evin also believes that within a few years innovation will be a topic in Iraqi Kurdistan, and in Duhok region the people will have more focus on innovation and innovation strategy. Evin pointed out that we must start somewhere with actual work to plan, to develop a strategy and implementing the strategy with some knowledgeable innovation managers. “This will be a great process and a successful project if we look at the outside world and how they work with innovation”, said Evin.

Evin said, “that they work mostly with service innovation both in universities and in other organizations. As long as I know, Duhok region has worked with service innovation for decades and in Iraqi Kurdistan”.

TR: “Why is it that way?”

Evin answered, “as a PhD I can’t answer that, but one thing is for sure, we’ve always been depending on others because we have always been oppressed, until President Saddam Hussein left the throne after the 2003 war. Around 2006 the Kurdistan economy began to boom and international companies began to invest”. Evin, Zirak, Ayad, Kovan, R1, R2 and R3 has
Empirical result

alleged that Kurdistan got their share of the budget; 17% in few years after that it started to go
down again. The Kurds received 10 % of the 17% that was the real budget; this was the order
of the former Prime Minister Nuri Maliki. All the above interviewed persons have said that
“they are at war with Daish (IS)”.

TR: If I have a product and I need to know what is right and wrong, how can
you help me with the approach?

Evin pointed out that they have a department that can help individuals, depending on the
problem, if there is a student or an entrepreneur that are not aware of all laws. Evin also said
that “we can help them when it comes to starting a store or something else”. Duhok
University has a lot of projects that are linked to the Duhok region, according to Evin. What
the PhD’s who are involved in the projects do is to look at what it is that Duhok region needs
to develop or if there are other problems that must be fixed. “Sometimes the Duhok region
looks at other regions in Kurdistan to see what they have done that is successful in that
region” said Evin. “The benchmarking process is relatively rare in Kurdistan because the
Kurds don’t have the people who have experience in innovation, process, strategy or
organizational development; at that point we are screaming for help from countries that have
experience in all those fields I’ve mentioned”, said Evin.

“Among us there are both knowledgeable and unknowledgeable individuals; Kurdistan’s
region have many people that are uneducated and illiterate” said Evin. “In other words, we are
not knowledgeable in all areas; for example, we do not have any universities that have
innovation managers”, said Evin. If there are a couple of innovation driver who are passionate
about development, then everything would be different of using innovation and innovation
strategy according to Evin.

Evin said, “I as a PhD have not heard that we have a research institute at all, no matter what
they are researching within”. There is a research lab at the university but it is mostly used for
examination work at master level or PhD level, according to Evin.

Evin has said, “that the Duhok University, cooperates with other universities outside the
country. Duhok, cooperates with American universities, German universities, and more, they
have collaborated with other universities that are regional but not constantly, occasionally
only”. Evin pointed out that the collaborations have not acted on innovation, mostly focused
on how to make contacts with other universities outside Kurdistan to send their masters
Evin suggested that collaborators need to increase more and more in case Duhok region wants to have a strong innovation strategy. Evin points out that there have been workshops but mostly as argumentative workshop then comes a little brainstorming into arguments. “But if there would be a workshop and those who participated in the workshop come up with very important changes and improvements”, said Evin. The proposals should be forwarded to the officers in Duhok region, but the thing is that nobody wants to take the responsibility according to Evin. Evin said “there should be one or two in the region who have the responsibility to make sure the proposal is coming in to the right hands, so there won’t be any excuses like ‘we don’t have time for this right now but we will take care of it as soon as possible’ and then nothing happens”.

Evin pointed out that all the meetings regarding collaborations are mostly about problems that occur. The talking is about what is right and wrong. “Another problem Duhok region has is when a person gets sick, they seek medical care outside the Iraqi Kurdistan; this is one of the biggest problems and a lot of complaints that we need to improve the medical care that is an essential resource for all of us”, said Evin. “All projects have not been implemented. If all projects had been implemented, Duhok region would have a different standard. Why not all projects are done is because of those persons in charge” said Evin. Those projects that are done are building projects, which are the will of the elderly who are in charge because they gain money from those projects. That’s the elderly’s mindset, according to Evin, the elderly feel threatened when something new happens or suggestions for changes come on the agenda, then the elderly reject them before it has been discussed.

“If there is an opportunity in the future there can be collaboration, between universities abroad with innovation knowledge, to help the universities in Duhok and Duhok region to gain a strong development with help from the innovation strategy”, said Evin.

Ayad Jaleel is a PhD and his friend Kovan is also a PhD they work together at the same organization. The organization is an engineering organization called RAI; most of them are geological engineers. Ayad and Kovan are innovation drivers they are working for development, they are working for a strategy that is going to last for a long time, at same time they want to bring systems called GIS, NETCAD and an intranet to their organization to make
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it easier for the people in the organization to take contact with each other and other organizations that are in the region and are a part of the municipality in Duhok region. They want to have a cluster where all of them are collaborating while they are sitting in different locations. That’s why Ayad and Kovan are doing everything to implement a functional intranet for the organization and a functional innovation strategy.

Ayad said that “Kurdistan has done a lot of projects, but the problem is that they don’t do any kind of research before making decisions about projects. For example there was a project to open private schools in different languages, like Swedish, German, French and English”. The idea for those projects was for example if pupils in the region educate in Swedish private school with the Swedish standard, those pupils would gain development later on for the regions in Kurdistan according to Ayad. Kovan rapidly answered and said, “The project fell in to a ditch faster than the implementation of the project.” Ayad explained, what the region didn’t notice was that Kurdistan is not like Western countries; here it is the parents that make decisions for their children’s future until they are educated. “Actually the project owners should first of all talk to the parents and hear what they have in their minds and what they think is the best for their children”, said Ayad and Kovan agreed.

Ayad suggested that when it comes to innovation, in general, first of all Duhok region need to educate all the elderly in high positions so they can understand what innovation is and how important it is the meaning of innovation and the importance of it. Ayad pointed out that they need a group of individuals that have different knowledge in different fields, to discuss and to make a process for innovations strategy. “The strategy Duhok region have is an old strategy it goes back ages, so we need to implement a new strategy, and here you came in as a researcher”, said Kovan. He also said “we were looking for persons between earth and heaven who had knowledge in innovation and have contacts that are needed for helping us to develop an innovation strategy and you ended up in our organization thanks to your uncle when he mentioned you and said you had knowledge in innovation”, Ayad said “I as person that don’t shout out, I shouted out loud and said I want to meet him tomorrow”.

Ayad and Kovan recognized that it’s not a shame to admit when you or your organization needs helps from external individuals, “we need help to develop an innovation strategy”, they said “Duhok region should be the foremost region in Iraqi Kurdistan with a strong innovation strategy so all other regions can look at us as the foremost region with a strong innovation strategy, our region will be like Silicon Valley” and both of them laughed.
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“We have another problem and that is as organization we don’t have any systems in our organization”, said Kovan. The systems RAI need are a GIS system and a NETCAD system for all our projects, the GIS system RAI needs must be with intranet so all the organizations that are linked to RAI and all employees must have access to the system, according to Ayad. GIS and NETCAD systems must be in Kurdish, English, Turkish and Arabic because those are the main languages in Iraqi Kurdistan. Ayad pointed out that they don’t want a system from China or other Asian countries “if there will be a malfunction then we have to travel to those countries to solve the problems, we have experience from that earlier”. Ayad said “some of us in the organization are innovation drivers because we like to change the organization after trendable changes”. Ayad and Kovan think it’s time to implement innovation and innovation strategy permanently this time, not just talking about it or planning some seminar and after that nothing happens.

Ayad said, “We need innovation strategy and it’s about time we implement one for the region’s future, for our future and for the next generation’s future.”

Ayad and Kovan asked the researcher a question, “What can you do to help Duhok region and Duhok’s universities, or RAI to work with innovation and innovation strategy?”

For me as a researcher to receive a question like that is a privilege, but the question is not easy to answer just like that. The only answer they got from me was that I would come up with something good, when everything is done; I will answer that question in the discussion chapter.
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The researcher will analyze what he thinks is the most important for the research.

8.1 What is innovation

What is innovation? Innovation is the freedom to work with new products and be able to develop. Innovation is about developing new ideas in the daily work and it can develop growth in a region. Innovation is something that is needed in our lives when it comes to new and useful products and services. Innovation is a key factor for the people of Kurdistan; Duhok region is a part of Kurdistan and implementing an innovation strategy in Duhok region will gain development for the region. When it comes to developing a strategy linked to innovation Kuczmarski (1996) and Tidd and Bessant (2013) argue that innovation affects everything we do and that innovation is everywhere, and that the ideas they describe are that innovation is a process that will benefit Duhok region. Kuczmarski (1996) has said that the benefit that is made is realized commercial products, processes or services. Kuczmarski (1996) has also pointed out that innovation can be a process, a strategy, it is about benchmarking, and working in teams. Innovation is brand new to Kurdistan and the Duhok region, and the people in Duhok region don’t work with innovation or innovation strategies yet. That’s something Duhok region wants to change according to most of the interviewed persons. The questions to ask are: What can Duhok region do to prevent the barriers which are preventing innovation and innovation strategy? Why are they afraid of innovation? Is it something new for them? Or are they afraid of that they will lose their power over employees? The researcher believes that the answer is that they are afraid of losing the power over employees, and as Kuczmarski (1996) said, the CEO’s think that innovation is risk-taking.

The persons who have the strength to work with innovation and to change the region, or the organization they work for, are not being taking care of. The people sitting in the government are elderly and they are against changes, they will do everything they can to put up a barrier to stop the innovation drivers. Organizations that put up barriers are afraid of innovation, because innovations are risk-taking for them and innovation scares the CEO’s says Kuczmarski (1996).
The researcher interviewed two CEO’s and claimed that they have innovation and an innovation strategy in their organization and that they are developing innovation and an innovation strategy. It was clear from hearing and seeing their body language that they were pretending about innovation and the innovation strategy in their organization. There are companies that pretend that they have innovation or an innovation strategy just to have power, according to Kuczmarski (1996). Sometimes the CEO’s are not aware of the aggressiveness that innovation has, and that it requires that CEO’s invest in innovation for development, not just paying some money to R&D for new research on product development (Kuczmarski, 1996). It was exactly what some of the CEO’s told the researcher in the ongoing interviews, they said that they pay consultants for some research that they are interested in and they are capable of handling the case, that’s innovation for them just spending some amount of money. Innovation is the new trend and the people in the Duhok region are aware of that they have to learn about innovation and strategy because sooner or later they fall behind the development. Innovation is a hot topic and it is used more and the organizations that invest in innovation will have a better result according to Kuczmarski (1996).

### 8.2 What is strategy

A few of the interviewed persons claimed that Duhok region, or the organizations that the people work for, have innovation and an innovation strategy but that they don’t use it a hundred percent. Others said they do not have a strategy at all, they even said “if we had a strategy we would be able to use it one hundred percent“. The researcher assumes that if there was a strategy, according to those who claim that the region has a strategy, it would be visible if the region was working with that strategy. The researcher noticed after all the interviews were made, that the region is lacking an innovation strategy.

There was no cooperation between the different municipalities included in the region, and how can there be strategy if the municipalities do not cooperate with each other? As a researcher it was hard to see anything in the region that was showing any signs of that Duhok region is working with innovation or innovation strategy. They might have a strategy but it is from the Stone Age. Sörmland’s strategy might not be the best strategy but it is a working strategy. The organizations in the Sörmland region have a clear vision, they have a clear plan of the strategy and they are collaborating with other municipalities in the region.

What Duhok region needs in order to implement the strategy is to have a plan on how strategy should be implemented, as well as they need a ploy on how to do it and what patterns should
be included in the strategy. Not to forget that position and perspectives also are parts of the strategy. Positioning Duhok region with a sustainable strategy, Duhok region need to look at how the region is going to implement a strategy in the region to gain a strong position and to be competitive. The perspective is about the region using different mindsets to manage the strategy. Duhok region is missing a strategy that the region can follow, once a strategy is developed according to the five P's, the region can have a sustainable and effective strategy. Duhok region does not have a strategy that follows the five P's at any circumstances. What Duhok region should do to acquire an innovation strategy for the region? Making the region having a strategy requires a plan for the strategy. Mintzberg (1987) pointed out that all individuals, municipalities and organizations have plans for things they do. That’s what the researcher is saying; Duhok region need to have a plan for the rise of a strategy. A plan is like brainstorming in a team for planning of a strategy, planning is an important part of the strategy. The plan will give the answer to how to collect the important parts that are included in a strategy to be implemented. Ploy is needed to manage and develop a strategy (Mintzberg, 1987).

A plan is an important definition of a strategy, according to Mintzberg (1987). Duhok region need that important definition of strategy, to get it Duhok region need a kick-off or help from external individuals and organizations. Strategies can be planned in advance but the strategy is being developed consciously and purposefully. A strategy can be a ploy, in the sense of a certain maneuver intended to mislead or distract an important actor, such as a business rival. Pattern is a phase to manage the planning of the strategy to be transformed into action in order to make a decision on which result it will receive or what the effect will be. The strategies could be the intentions, which are expressed in plans to take measures for the decisions of the strategy to be realized. Results of the decision in terms of a cascade of measures can take on a form that might or might not be very close to the original intent (Mintzberg, 1987).

There will be a pattern, or a set of patterns in the stream of documents. The plan and pattern phases are not dependent on each other. Mintzberg (1987) distinguishes between strategies where the intent of the intentions will not be realized for the plan to be designed to the strategy. What is strategy? Mintzberg (1987) points out that the strategy can be regarded as a position. The idea is to review the placement of an organization in the environment that it will thrive (Mintzberg, 1987). The definition, strategy, becomes a matching mechanism independent from the relation between organizations. Strategy may be the perspective of the importance of a sustained thought about the world where the organization operates. The
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influential members of the organization share their thought or perspective. Perception is an organizational personality. The worldview is showing the intentions and/or actions of members, as common thinking and behaving bind individuals (Mintzberg, 1987). For Duhok region to gain a strong strategy they have to follow the five P’s as a method.

8.3 Regional innovation strategy

Most of who were interviewed agreed that Duhok is missing innovation strategy in the region. For the Duhok region to have an innovation strategy, the first thing needed is for all the organizations to collaborate because organizations are important links in the innovation strategy. The organizations are good at knowledge transfer. What belongs to the innovation strategy, are that companies base their businesses on the social and cultural proximity, and to stimulate the local learning process. Not much interaction with the knowledge organizations is necessary to conduct their innovation activities (Asheim & Isaksen, 2002). The researcher agrees with Asheim and Isaksen (2002) but the regional organizations in Duhok region do not have the knowledge about innovation or innovation strategy.

There must be other organizations that may be important for innovation strategy in the Duhok region. Examples of key organizations can be universities in the Duhok region; there is an opportunity for establishment of innovation education. The education will give a good scattering effect in the Duhok region and other regions could follow and spread it. Asheim and Isaksen (2002) and Asheim and Coenen, (2005a) has said that innovation is about knowledge and networking with public and private collaborations in innovation strategy. The knowledge innovation takes the help from research institutes to some degree.

The universities of Duhok region have not done much to implement innovation and innovation strategy, but they have muted the innovation instead. They should ask themselves what can be done to implement innovation and innovation strategy because they claim that they want to work with innovation and innovation strategy. Borysiewicz (2012) says that the universities should work with applied research; there are numbers of functions that support innovation strategy, Science Parks, Business Parks, incubators and many more. The availability of university knowledge is a fact, the availability from a university has different sources in different fields, and the result is interesting when it comes to interdisciplinary innovations Borysiewicz (2012) pointed out.

The other example is the engineering organization known as RAI, (RAI is an engineering company in Duhok and the working fields are engineering, building waterdams, irrigation and
water surface), and they can also be a key organization or a supporting organization. There are many engineers that work for the RAI and they are burning for development and are innovation drivers. They are demanding that everything has to change and has to be developed with a better marginal and a sustainable innovation strategy. All of them are analytical and are looking for scientific research that they can use as arguments for the strategy of innovation. There is a supporting infrastructure, which counteracts obstacles and has more of an analytical character and belongs to the innovation strategy in an ideal form. It relies more on the analytical knowledge base, research will form the foundation for the scientific arguments for innovation strategy (Asheim & Coenen, 2005a; Asheim & Isaksen, 2002).

8.4 The barrier of innovation strategy
A lot of the interviewed persons were talking about barriers. Almost all of them asked: “What can we do to prevent the barriers that are holding back innovation and innovation strategy?”

The barriers are about lack of knowledge. Innovation strategy has three barriers and they are organizational thinness, fragmentation and locking (Doloreux, 2002; Isaksen, 2001; Tödtling & Trippl, 2005). The barriers in the Duhok region are not just the close-minded elderly people; there is an ongoing war with Daish (IS), and there is the budget crisis that is preventing innovation. There is organizational thinness in Duhok region and it is about low employment and lack of actors and knowledge of the region. The interviewees even complained about how difficult it is for them to understand innovation and innovation strategy, they paint everything black that has to do with innovation. Some of the CEO’s said that they don’t collaborate with each other on a high scale or they don’t collaborate at all. Regions with organizational thinness have difficulties to build innovation strategies. Organizational thinness is because lack of collaborations between universities, entrepreneurs and actors, that is a weakness. Why it can be like that is because of lack of networking and that there aren’t any developments of new technology or new methods to prevent organizational thinness (Isaksen, 2001; Tödtling & Trippl, 2005). There are innovation drivers that represent the younger generation and they are entrepreneurs who are not afraid of changes or development and they want to implement innovation and innovation strategy in their work place or in their region.

Tödtling and Trippl (2005) are saying that new entrepreneurs aren’t afraid of developing innovation networks, and points out that the new entrepreneurs are even better at it. The project should not be put aside or deliberately forgotten only to prevent the development of a
region or an organization. There needs to be one or two people in charge of the project results to make sure everything goes through and that no one puts the responsibility on another, it can easily happen because no one wants the responsibility.

8.5 Clusters
Organizations that are a part of innovation strategy are members of clusters. Because of clusters, organizations can help each other as organizations to develop innovation strategy and their way of thinking. The organizations are not just linked to one cluster they can be linked to other clusters; at the same time they are creating a sub-cluster. Porter (2001) has pointed out that innovation strategy needs clusters so they can employ the knowledge. A Cluster is a group of organizations that are connected as a cluster. Clusters are connected companies and associated institutions in same fields (Porter, 2001). Interviewing a tutor, questions were asked about collaboration, and a supplementary question was asked about clusters. The answer was: “We need clusters to get sustainable strategy and to make everything easier for us as a region and our will is for collaboration between all organizations in the cluster”. Clusters arose when organizations began to collaborate with each other to survive in the market since it was for knowledge exchange. Clusters are all about the collaboration among the organizations in the clusters and the organizations have different experiences that they share with each other (Porter, 1998; Porter, 2001).

Duhok region need to adopt sustainable cluster in different fields to gain the innovativeness that is required, for creation of innovation strategy. Few of the interviewed wanted to have an innovation center where they can gather and exchange knowledge especially in innovation; this kind of innovation center is a starting point for creation cluster in Duhok region.

8.6 Government
Kurdistan should have an agenda of innovation and innovation strategy. The parliamentarians in the Swedish parliament have a strategic plan on how they can work with innovation and innovation strategy. The politicians in the Kurdistan parliament haven’t discussed anything about how they can work with innovation strategy. The politicians that make decisions about regional changes are actors and they have the role to shape the innovation strategy (Tödtling & Trippl, 2005). Kurdistan and the Duhok region need political leaders that are innovation drivers who are strong and are fighting for changes and development to be able to implement the innovation strategy. It's important to have strong regional and political leaders that are committed to developing an innovation strategy (Hassink, 2002). While politicians in Duhok region don’t understand the meaning of innovation or how to work with innovation and
innovation strategy, this kind of behavior has to change. The politicians must have an understanding of innovation and innovation strategy; they have to educate themselves for more understanding about innovation and innovation strategy.

8.7 Conclusion

The results of this research are that Duhok region doesn’t seem to have an innovation strategy, but people are willing to develop a sustainable strategy, which will then be implemented in Duhok region. They need help and they are looking for collaborators, who are willing to help them developing their universities, their organizations and the private sector.

The researcher is going to answer questions to gain more understanding of the essay. The researcher shall answer the main research question and then the researcher shall answer the supplementary questions, SQ. The questions are answered before the discussion section, in order to facilitate holding a discussion and then make suggestions on how Duhok region can work to implement a strategy.

8.7.1 What role could an innovation strategy play in the Duhok region?

An innovation strategy is a strategical process for developing countries, regionals, municipalities and organizations; the strategy is to build a sustainable infrastructure that the region should work for. Innovation strategy covers all areas such as health, welfare, labor, and technology. These categories should be included in the innovation strategy and always being able to improve the living structure of the region.

The role that innovation strategy is going to play in Duhok region is development and new thinking. The Implementation of an innovation strategy will get Duhok region to grow both in terms of organization and of knowledge. The role of innovation strategy will affect Duhok region in a positive way, by making it more cooperative between different organizations within the region and new clusters will occur. Organizations, universities, municipalities and regions will gain knowledge of innovation and innovation strategy. Then the Duhok region will become more competitive against other regions of Kurdistan. Both national and international companies will look to Duhok region where there is a well-functioning innovation strategy.

What Duhok region can do is to look at the Swedish innovation strategy model (see Figure 7) and the triple helix model (see Figure 6) to know which organizations should be part of a regional strategy. The simplest is to use the triple helix model in Figure 6, to gain one or two teams that are going to work to make an agenda for innovation strategy. Duhok region needs
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an innovation strategy that is sustainable and they are capable of forming one sustainable innovation strategy and also implementing that strategy. The only thing they need is to get started and guided on how they are going to work as innovative teams with the latest methods and models.

8.7.1.1 **SQ1: Are there any possibilities that Duhok region can adopt an innovation strategy?**

The answer is a big "YES"; Duhok region has the opportunity to adopt/implement an innovation strategy, especially when the budget crisis will be over. There is a war going on with the Daish (IS) but that has not affected the Kurdish region as much as the withholding of the budget. The close-minded elderly people that also are barriers won’t be in office infinitely. What Duhok region could do in the near future is to start building an innovation center where they can educate individuals who are interested in innovation. The researcher knows that there are a lot of the individuals that were interviewed who are interested in a meeting place for innovation drivers where they can meet other innovation drivers. What they like most about that, tends to be the key to success and development; so why lock in innovation-driven individuals in a cage – instead unleash them to do some good for the region. These are and can be the Duhok region’s key to development. Duhok region could be developed within the latest trends with the use of innovation and an innovation strategy. Duhok region has great potential to develop a sustainable innovation strategy, because Duhok is an important region and lies on the two borders of Turkey and Syria, where there is a lot of trade collaboration. The important factor for Duhok region is to have a functioning and sustainable strategy; it would attract national and international companies to the region to establish business, which would lead to more jobs and less unemployment.

8.7.1.2 **SQ2: What can Duhok learn from Sörmland’s strategy?**

What Duhok region could do is to read about various regions’ innovation strategies in order to have an understanding of how an innovation strategy works and what the important factors are for building a sustainable strategy. What Duhok region also could do is to visit for example Sörmland to see how they work with innovation strategy. Then they will get advice and insights on how they can work to develop a sustainable strategy. This meeting may provide new contacts for both the Duhok region and the Sörmland region. New business opportunities can arise when Duhok region is a region with development opportunities.

The Duhok region can take Sörmland as their role model. When it comes to having a sustainable strategy, some who were interviewed claimed to have an innovation strategy but
said that they don’t use the strategy to one hundred percent. According to the researcher surveys and interviews, it has emerged that Duhok region lacks innovation strategy. When it comes to universities in Duhok region, none of them have a research department for innovation and innovation strategy. The universities of Duhok region are not used to working with innovation and they don’t have any sustainable cooperation with different organizations, the only cooperation the universities have is consultant's services against payment. Sörmland is working with their Vision 2020, and they collaborate with other organizations, as well as with universities in the region. Sörmland’s region has made a cluster where everyone can work together more smoothly. In Sweden there is governmental R&D to work with innovation. The government in Sweden has an agenda for how the country is going to work with innovation by following the vision for the country's innovation strategy. The state puts a lot of emphasis on regions to work with innovation, but in the end it’s up to the regions to decide if they are going to work with innovation strategy. When the Swedish government have made decisions about the vision for whole Sweden, but every region can choose to work the vision made the Swedish regional government or the each region may change the vision after the region's requirements. The thing that Duhok region really can learn from Sörmland’s region is how to develop a vision for the Duhok region; the vision will make it easier for the region to put up some goals that they can work toward.

8.7.1.3 SQ3: What can Duhok region do to adopt an innovation strategy?

What Duhok region can do to adopt an innovation strategy is to gather all universities and organizations in Duhok region and explain the meaning of this gathering. The meaning is that Duhok region should develop a new "innovation strategy", Duhok region has to determine about the decision because the project will be life changing if they adopt an innovation strategy in Duhok region. As the researcher said in SQ2, Duhok region should benchmark against other countries innovation strategies to learn from them, and they can for example visit Sörmland to learn how Duhok could work with innovation strategy.

Duhok region is lagging far behind but nothing is impossible, especially when there are people who are passionate about working with innovation. They can be the key persons for this kind of project of adopting innovation strategy.

In the city of Duhok, there are five universities and in the remaining municipalities included in the region, there are at least one to two universities depending on the size of the municipality. Duhok wants to collaborate with universities in Sweden; many persons that the
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researcher interviewed from the University of Duhok said they are willing to cooperate with Swedish Universities for their great skills in innovation and innovation strategy. In other words, Duhok region has to benchmark against Sörmland region to gain knowledge about innovation strategy, Duhok region will benefit from Sörmland region and their knowledge of innovation.

8.7.2 Result of the research

The answer for the research won’t be long because when doing research against something that doesn’t exist is very difficult if there isn’t any research in Duhok region to investigate.

The result of the research is complicated because when people are researching about anything let’s say strategy, the researcher is going to do an analysis about the strategy in the region. And the researcher can look at region earlier work according to the strategy, that research will be very helpful. But when a researcher is researching about innovation strategy that doesn’t exist and the researcher don’t have documents about their early work according to the strategy. Duhok region don’t have innovation strategy and there was no evidence that Duhok region has worked with innovation or innovation strategy. The researcher has to tell the readers that comparing with Sörmland’s strategy isn’t possible because the Duhok region doesn’t have an innovation strategy. To have a strategy that means to have a plan and to have a pattern, but if there isn’t a strategy that means they don’t have a plan or a pattern to work after.

The answer for this research is that Duhok region is lacking an innovation strategy and the people haven’t worked with innovation earlier. All persons interviewed about innovation and innovation strategy had some knowledge about innovation; what the researcher is trying to say is that they knew what innovation means, but they were lacking the purpose of innovation or innovation strategy. Some of the PhD’s that were interviewed knew what innovation was and the meaning of innovation and innovation strategy. But unfortunately Kurdistan doesn’t have the same opportunities as in Sweden when it comes to working with innovation and don’t have innovative organizations that are active in spreading the knowledge of innovation. Duhok region does not have the same opportunity as in Sörmland’s region, and the region lacks innovative organizations because of all the barriers that are preventing people to work with innovation or even to implement an innovation strategy. All this is because the elderly are afraid of innovation and they don’t want the people that work for them to be cleverer than those in charge.
Analysis, conclusion & result

As a researcher for this essay the answer is that “Duhok region is lacking in innovation and innovation strategy.” According to the interviewed persons there are many innovation drivers in Duhok region. The region should give the innovation drivers chances to develop and implement innovation and an innovation strategy, and that could be a big opportunity for the region to grow. The researcher has decided that Duhok region is in need of a sustainable innovation strategy and needs to implement the innovation strategy actually at once. But first, Duhok region needs to create an innovation strategy (see chapter 9.2).
9

Discussion: Strategy implementation and further research

9.1 Discussion

Kurdistan, the autonomous and federal region in Iraq, has made wonders that no one thought was true I did not even believit. After 1991 when the Kurdistan region of Iraq was protected by the international coalition, the whole Kurdish region was a red zone that means no flight zone. The thing that got Kurdistan growing and flourishing was after the US war against Iraq. From 2003 until today the Kurdish region has evolved from no international investing, until more and more investments are made in the region. There are many foreign consulates in Hewler (Erbil). The economy blossomed and Kurdistan had its budget until it started to discover new oil reserves around 2012. The Kurds wanted to sell their oil in the new pipeline because the oil wells were in the Kurdish area. After that the conflicts between Baghdad and Hewler escalated until Nuri Maliki, the former Prime minister of Iraq ended paying the budget to Iraqi Kurdistan in January 2014. Before the conflict over oil, there was cooperation between Kurds and Arabs. The Kurdistan region is developing in all areas like infrastructure, quality of life and development in education, health and welfare improvement. The Kurdistan region is open for collaboration. When it comes to development and investment, almost everyone interviewed has claimed that they are willing to collaborate with other countries that want to help Duhok region to develop their strategy.

The Iraqi Kurdistan is cooperative and want’s to bring westerniers eyes on the Kurdistan according to Figure 9 there is a text boxes that is written see Figure 11.

Figure 11 Is taken from figure 9

To do research about something that already exists is much easier than researching about something that does not exist. It is a great challenge for the researcher to trust the interviews that were made. To look for the truth is a challenge in itself but the researcher is aware of Duhok region, and the researcher knows individuals who work in the region, these enabled to
get in touch with important people working in development, infrastructure, entrepreneurship and universities. The most difficult thing was being able to know who told the truth and who did not speak the whole truth about innovation and innovation strategy, because they maybe wanted to make things appear better than the reality. The more persons the researcher interviewed, the more the researcher came close to the truth about innovation strategy. The researcher became more and more convinced when receiving an example like: “If we had an innovation strategy, then everything would be based on innovation and innovation strategy. We would have groups which are constantly doing research on innovation, as well as regional municipalities which would cooperate with each other“.

What Duhok region needs is to open up an innovation center, where people can visit and be able to get advice about their product and how they can handle the process working with their product or service? There were many engineers and university tutor and PhD’s who were asking about an innovation center where they can gather and work with the innovation questions and knowledge exchange, this would open the doors to more new ideas and innovative companies in the region. Duhok region would become more competitive and more entrepreneurs will focus attention on Duhok region. Much of this is the wish of the people who were interviewed, and when the researcher told them who were interviewed that Swedish universities have incubation activities that help students and PhD’s and graduate students to develop their ideas into business, their eyes just glistened with curiosity and a lot of them said that is what we are interested in here in Duhok region.

They want to develop, they don’t want to be dependent on the state or local governments, and many of the students who graduated from universities become unemployed because they depend on the state or municipalities in which they live in. The first thing they say is that after they have graduated the state must find work for us or we’ll be unemployed. The state can’t fix a job to everyone who is examined. There must be other ways to find a job, for example by starting their own business in the field the individual likes. Many male students who become unemployed open either a small business selling fruit and veg or candy or the male students will buy a taxi and becomes a taxi driver. While the female students stay at home because throughout the Middle East, it is not common for females running a shop or become taxi drivers. Therefore, there must be other ways that Duhok region can manage the examined students to contribute their knowledge so that they can run their own business.
Another problem is that neither the primary school nor the junior high school teaches about entrepreneurship, perhaps they should introduce young entrepreneurs at secondary high school like Sweden has. They can learn how it functions to start a business and running a business. They will have the experience with them for rest of their lives and they will develop their knowledge at the university. Universities should be a place where students can turn to for help with running a business, developing products or services, similar to the Idélab (laboratory of ideas) at Mälardalen University. This kind of opportunity will help the Duhok region’s economy and their innovation strategy to blossom.

The manager of the Chamber of Commerce and Industry wants those who have knowledge in innovation, innovation strategy, innovation advising, product/service and many more fields to open an educational center where they can educate themselves in innovation. The training shall be for those who want to learn about innovation. The manager has visited Sweden and met important people in Swedish politics and he pointed out that they talked about innovation and innovation strategy, Duhok region not accustomed to working with innovation, therefore the manager points out again and again that it needs to start an educational center which teach innovation and how to handle the innovation work in development. That’s where the researcher, the Mälardalens University, Sörmlands region and the Swedish people came in because of the knowledge about innovation and innovation strategy. As mentioned above to help Duhok region with some kind of education so they will learn and understand what’s the meaning of innovation and they would have a greater self-confidence.

9.2 Strategy implementation

"Without strategies for change, vision is a dream. Strategies are ways of pursuing the vision and mission; they are informed by vision, mission, and values. Strategic plans are ‘road maps’ of a changing terrain in which a compass (vision) is needed” (taken from Covey in Gill, 2002, page 314). It requires creating an innovation strategy for Duhok region, this is a hard task and Duhok region need help to develop a strategy that is sustainable, for the region. In order to develop a strategy for the region, they need to create one or two teams that will work on creating an innovation strategy, which will then be implemented in Duhok region; the development process will take time.

How should the team or teams be created? The team or teams shall be created through the triple helix model where the academy, industry and government are included, as well as the private sector. Why create the team or the teams from triple helix? The triple helix is about
knowledge implementation and it is the basis for the strategy. In Duhok region there are seven municipalities and need to involve all the municipalities to develop a strong strategy. The first thing to do is make an agenda for the team or the teams that are going to work with the strategy. To make an agenda the team or teams have to follow the innovation process search, select, implement and capture, see Figure 3.

Once the team or teams have been created, they shall have a clear understanding of the purpose for which they have a responsibility that it needs to develop and implement the strategy. The team or teams will receive instructions for why they have selected them for this project, that they should be involved in creating innovation strategy for Duhok region. There will be difficulties because many of the team or teams are not accustomed to working with innovation; this will be the hardest part. When they have to share ideas with others and that no one has more power than the other individuals or more power over the other team or teams. Working with a process that individuals have never worked with before can be a burden; he/she can easily lose interest in what he/she will be working with. Another problem can be if there are individuals with a higher position, they might do everything to show their rank and will thereby show their hierarchical position by enforcing their will. The entire Middle East is hierarchical, an individual with a higher position than other individuals can make suggestions that are not good for the organization but no one can argue with that individual because of their higher position. For example when a CEO has given an order to the employees, no one can argue by saying it is an incorrect decision.

To make it easier for the team or teams I as a researcher have developed a model that will make it easier for the team or teams to work with the development of an innovation strategy. What I wanted to do is to make it easier for Duhok region to follow a process, which will facilitate for the team or teams to generate ideas about creating an innovation strategy. Why I wanted to develop a model as I said above is because I want to simplify the work and the understanding of the work concerning the development of a strategy.

I will now explain how to use the model of The Strategy planning (TSP) model: There are six factors in each factor, there is a concept; Vision, Channel, Resource, Barriers, Structure, and What’s the value (see Figure 11). The model will start with the Vision and after that the team or teams can take on which factor they want and what the team or teams, themselves think is easiest for them to start with after the vision.
Discussion: Strategy implementation and Further Research

**Vision:** The Vision is the first factor that the team or teams are going to work with. The meaning is that the team or teams is going to set-up a new vision, for example a vision for Duhok region with help of the governor’s staff. The vision is going to be about development, using innovation as an asset to be able to create a sustainable strategy for Duhok region.

**Channels:** Finding new channels for the strategy and for the innovation.

**Resources:** In this factor the team or teams have to ask themselves, what kind of resources they need, if it is money, people, organization and more.

**Barriers:** Barriers are pain that must be destroyed or educating the barriers so they understand what the innovation is about and why the region needs to implement innovation and innovation strategy.

**Structure:** How are we going to structure the work of an innovation strategy? The creating of an innovation strategy begins with creation of a structure that they are going to follow from start to the end.
Discussion: Strategy implementation and Further Research

**What’s the value:** The value we want is success, implementation of the strategy and using the strategy.

To make it easier for individuals who will be using the TSP model, I have made questions that support the use of the TSP model, see the questions below.

**Vision:**
- Why do we need a vision?
- How can we focus on our vision?
- Why are we pursuing strategy?
- What can be done to comprehend our vision?
- How are we going to proceed in order to create a strategic vision?

**Channels:**
- What kind of channels are available?
- How do we know that it is the right channel?
- What kind of channels should we choose?

**Resources:**
- Who is willing to participate?
- What kind of resources is needed?
- How do we find the resources?
- Are there any supporting resources?
- How can we find the supporting resources?

**Barriers:**
- What are barriers?
- What can we do to prevent the barriers?
- Why do the barriers exist?
- How can we change the negative thinking to positive thinking?

**Structure:**
- Do we need a structure?
- How will the structure look like?
- How will the strategy be structured?

**What’s the value:**
- How will the strategy favor us?
- How effective can the strategy be?
Discussion: Strategy implementation and Further Research

The questions above should be a guide to those who are working to develop a strategy with help of The Strategy Planning (TSP) model. The TSP model should make it easier for groups to manage the development of the strategy or development of the organizations, or in other fields. Let us say that a person is starting a business but need to develop a strategy to be able to get a better grip and more understanding of the business strategic planning. When this person and his/her team starts using the TSP model they have to start with a Vision, the vision is a kick-starter for whole TSP model, as I mentioned above. I always say that a project without a vision is not a project at all.

TSP model is an inspiration of the Business Model Canvas and Kotter eight-step model; the TSP model it is about the developing strategies for regional, organizational and more.

John P. Kotter, Professor of Leadership at the Harvard Business School, followed over 10 years more than 100 companies worldwide in their change programs, studied the effects and drew conclusions about what helps and hinders change. He summarized his experiences in eight steps as he considers it’s necessary for the success of change projects (Kotter, 2007).

1. Create a sense of seriousness and urgency to change to be possible, the organization must mobilize, employees must give more than usual and to cope with it, they must be convinced that change is necessary, if the organization is too smug, confident that things are going well and the organizations will think that change is not necessary for the organization (Kotter, 2007).

2. Form a steering committee coordinated no change management success through a man's efforts, how good that person may be. We need a team of leaders with sufficient status and power within the organization in order to implement changes. The team should be composed of leaders from different levels to maximize credibility, and it must be welded together and stand united behind a common goal (Kotter, 2007).

3. Formulate vision and strategy every successful change management based on a scenario approach, designed by the steering committee, which appeals to customers, shareholders and employees. Kotter identifies three reasons why a vision is necessary for change: The vision clarifies the company's direction every change process will lead. The vision motivates employees to do things that may not be in their own short-term interests, it shows a future it might be worth sacrificing anything. The vision is coordinating the effort. If everyone knows where they're going, they can take decisions individually (Kotter, 2007).
Discussion: Strategy implementation and Further Research

Effective visions meet six criteria:

- They provide a picture of the future
- They speak to people long-term interests
- They contain realistic goals
- They are clear enough to guide decision-making
- They are flexible enough to allow room for individual initiative
- They are easy to convey

Kotter also warns that it is not easy to create effective visions; it requires time, dedication and perseverance.

4. Communicate the vision when the vision is formulated, it must be communicated to all involved and interested. Seven principles facilitate communication of a vision (Kotter, 2007).

- Keep it simple – write and speak clearly and simply.
- Use metaphors, parables and stories.
- Spread the word through many different channels – meetings, memos, newsletters, bulletin boards, intranet, with several
- Repeat, repeat, and repeat!
- Live as you learn – if leaders do not in practice follow the vision, no one will believe it.
- Explain the differences – if management does not appear to follow the vision must be explained in detail and clearly.
- Listen – to ensure that the two-way communication.

5. Give employees the power to act now the work in progress and many different obstacles will emerge. It is important to give as many employees as possible powers to overcome these obstacles on its own so the process does not stop by (Kotter, 2007).

The obstacles are usually about

- Structures – there is the old way of acting at that hinders the change process?
- Skills – lacking the skills and knowledge to perform the new?
- System – is the system of communication, reward, evaluation, etc., that can support the new vision?
- Managers – Managers are for or against change?
Discussion: Strategy implementation and Further Research

6. Create short-term, gains change management and that takes time and many employees will need to have an energy progress to continue. Clear immediate progress will also counteract resistance and cynicism and shows that the work is progressing. As a rule, leaders must actively create and communicate short-term successes, not just wait for them to reveal themselves by themselves (Kotter, 2007).

7. Mainstreaming to celebrate short-term gains may not be understood, as the process of change is clear. On the contrary, short-term profits are used to actively take the next step in the overall vision (Kotter, 2007).

8. Secure the new settings in the corporate culture. The last step in the change process are to incorporate the changes in the organization's culture, so that new becomes the accepted norm: that's how we do things here. The organizational culture consists of standards for how to behave, with rewards and sanctions to maintain those standards; and employees' shared values that can take years to establish and change. We therefore need both patience and action to change the organizational culture to fit the realized vision (Kotter, 2007).

Eight-step model is designed to assist organizations in developing the organization before it is too late, Kotter (2007) talks about a sense of urgency, as I have mentioned before the world is progressing rapidly and increasingly becoming globalized world. Kotter (2007) defines the definition of the word urgency, as a combination of *thoughts, feelings, and behavior*. The thoughts are great opportunities, the feelings are gut-level determination that the person wants to do something right now and it should be something new.

The behavior is a sense of urgency to come to work each and every day with a commitment to make something happen that is actually an important issue. It is a sense that other persons could take after and doing something new everyday, the movement of the behavior will come automatically. Kotter (2007) says that’s important because it’s about determination movement, which is a smart win. I have noticed that everything is going faster and faster, either you're in the game or you are not in the game, it is about taking action to remain and be strong. When there are successful changes the sense of urgency is rising, if they are not succesful changes everything slows down and everything gets much tougher and everything is much more frustrating (Kotter, 2007).

Why I mentioned the Kotter eight-step model is because my TSP model has a parable with Kotter’s model. The thing is that I didn’t know anything about Kotter’s model until the advice
Discussion: Strategy implementation and Further Research

from my supervisor. But Kotter has conducted research on it for ten years to develop the eight-step model.

9.2.1 Creation of the model
The creation of the TSP model was to simplify the reasoning behind the discussion and how the Duhok region can move forward with developing a strategy. The TSP model was created from the empirical result and analysis. The reason was to be able to touch the main categories in the analysis section, see Chapter 8. When looking at the TSP models fases; the fases that are included in the model are also customized after the analysis section. From my perspective when creating a model, arising from the research can be an effective method to work with, because the TSP model is connected to the research.

The TSP model will benefit the Duhok region in its creation of a strategy. The TSP model can be used in other areas as well as development of organizations, creating new strategies for development of services or product management.

9.3 Last words
In the discussion chapter, I would like to say as a researcher that Duhok region needs help because the Duhok region lacks innovation strategy. That's why I created the TSP model in order to simplify everything; I have noticed that the people in the Duhok region or in Kurdistan do not like to exert themselves too much. One interviewed PhD has said that they are working just for the money; they do what they should do because there is no pattern that they can follow. I have said before and I will say it again. Duhok region need help in developing a strong and sustainable strategy that "should" be implemented so that Duhok region “should” work after a structure.

Ayad and Kovan asked me a question, the question is; “What can you do to help Duhok region and Duhok’s universities, or RAI to work with innovation and innovation strategy?”

The answer is already answered – look above. Duhok region and the organizations in the region need to develop a sustainable innovation strategy and implementing the innovation strategy. What I can do to help Ayad and Kovan is to find an organization that can provide them with GIS, NETCAD and an intranet system according to their requests. The important thing is that the company has a workshop meeting where everyone in the organization has their say. The workshop can be the creative coffee break (Open Space method), it is a good
way for companies to solve their problems internally, and then they will become intra-entrepreneurs for the organization.

9.4 Further research

”I hope that this research will open a door for Duhok region that there are strategic developers who are willing to help Duhok region to develop their strategy and implementing the innovation strategy”. I’m one of the researchers who are willing to work with Duhok region to develop the region. My idea is “help to help”

This research could be a PhD research; there would be more about the development of the TSP model. The TSP model can be more effective if there is research behind it, let’s say there is three to five years’ research behind the TSP model. There are a lot of innovation models that organizations can work after, the TSP model main goals are the developing of the strategic planning, I’ve always liked challenges and that would be a challenge I dream of.

Another future research might be to look at the barriers. Then you can take a closer look at why there are barriers and how to turn the barriers to the positive. I also want to be able to see where the greatest barriers are, if the barriers are at state, regional or local.
References


**Internet sources**


General Direction of tourism/Duhok (a); Duhok Governorate, Kurdistan Region, Iraq: Retrieved January 20, 2015, from http://duhoktourism.org/service/history


General Direction of tourism/Duhok (c); Duhok Governorate, Kurdistan Region, Iraq: Retrieved January 20, 2015, from http://duhoktourism.org/service/geography


Tillväxtverket: Retrieved March 03, 2015, from http://www.tillvaxtverket.se/huvudmeny/omtillvaxtverket/uppdagochorganization.4.e8f46b8140a162b4fe1b1a.html


Appendix I

The questions are aimed for all the Universities in Duhok. For example if you work in University of Duhok (UoD) you talk about UoD or if there is a university in Duhok that work with innovations and it’s not your workplace talk about it anyway...

Name

Degree Status:

Workplace:

1. If I say innovation, what do you think?
2. What is innovation to you?
3. How do you work with innovation?
4. In what way can innovation be valuable to you or the organization you work for?
5. Do the Universities in Duhok or Duhok government have an Innovation system?
6. Have Universities in Duhok or Duhok experience in working with innovation?
7. Does the University in Duhok have a research group that is focused on innovation?
8. Do the Universities in Duhok or Duhok focus on innovation based on the categories below? Explain the YES and the NO
   a) Is it Product innovation
   b) Process innovation
   c) Service innovation
   d) Other innovation (Market/business innovation, organizational innovation, health innovation)
9. Is Duhok University dependent on engagement in R&D? (Research Development)
10. What kind of research institute does Duhok have?
11. Is there any innovations research institute in Duhok or Kurdistan (Iraq)?
12. Do Universities in Duhok and Duhok have any collaboration regarding innovation?
13. How important, is it for the Universities in Duhok and Duhok to collaborate to gain the innovation activities?
14. How often with aim to generate innovation, does collaboration take place with:
   a) Universities (including centers and other types of research collaboration)
b) Research institutes
c) Collaboration and network organization
d) Consultants
e) Science park (Business park)
f) Customers
g) Suppliers
h) Other companies (excluding customer and suppliers)
i) Others

15. How much innovations research and collaboration does take place in Universities in Duhok and in Duhok generally?

16. Is there any barrier for Universities in Duhok to work with innovation?

17. Is there any barrier for Duhok to work with innovation? Or for your workplace?

18. How is the availability in the Duhok region, regarding:
   a) Qualified labor
   b) Private funding
   c) Public funding
d) Business advice and expertise (marketing, management, Administrative)
e) Academic Expertise
f) Competence development
g) Collaboration and networking opportunities
h) Information about support
i) Other
Appendix II

The questions are aimed for politician to know if the parliament or government talks about innovations strategy or have a budget for innovation in 2015

1. As a politician how do you work with innovation?
2. Have the parliament experience in innovation strategy?
3. Is innovation strategy in agenda in the parliament?
4. Have parliament talked about innovation strategy for Kurdistan in general?
5. Does the government have a budget plan for innovation strategy?
6. Do you think innovation strategy would be a good tool for your department?
7. In what way can innovation be valuable for Kurdistan and the regions in Kurdistan?
8. Does the parliament focus on innovation based on the categories below? Explain YES and NO
   • Product innovation
   • Innovation strategy
   • Service innovation
   • Process innovation
   • Other innovation like (Marketing/Business innovation, organizational and health innovation)
9. How much research have parliament done regarding innovation and innovation strategy?