

- A case study in Iceland of the relationship between clients and external consultants in the aftermath of an IT-project

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# **EXECUTIVE SUMMARY**

Information systems are becoming an increasingly important component of a company's overall business strategy, and the demand for external IT-consultants to assist in realizing benefits from these investments is growing. A topic that recently has received attention in the media is how dependent companies become on consultants after they have assisted in projects: To ensure optimal utilization of the information systems, consultants continue to play a central role in a company's daily operations after a project is completed.

The purpose of this thesis is to investigate the relationship between client and consultant, by applying academic frameworks to two recently conducted IT-projects. The aim of this investigation is to evaluate aspects of the client-consultant relationship that influence how independent the client becomes from external consultants in the aftermath of an IT-project. The first IT-project that was investigated addresses an implementation of a new project management approach in a bank in Iceland, an implementation that was assisted by a consultancy company that specialize in project management. The second project is a replacement of a complex ERP system in one of Iceland's leading companies within hardware and home improvements. An international IT-consultancy company assisted this implementation.

In our research we have identified aspects that can influence the degree to which clients become dependent on consultants in the aftermath of an implementation. Furthermore, we have discovered that there is a gap in the literature, and we have therefore applied theoretical frameworks from both change management and knowledge management to guide our research. Trust, expectations and respect in the relationship between client and consultants have proven to facilitate better knowledge sharing during the project. We have identified that the success of the internalization of the new implementation into the organization's routines and culture, is a determinant for the level of independency. This internalization is dependent on several things: The experience and assimilated knowledge of the consultants, and his ability to share knowledge with the client will affect the quality of knowledge sharing. Equally important, is the willingness and ability of the client to absorb the knowledge from the consultant. Furthermore, drawing upon his professional experience, the consultant should assist in facilitating for the client to continue operating the new implementation after the project is ended. The consultant should anticipate new changes within the client organization that could occur in the aftermath of the project, and facilitate for these changes. Moreover, we have identified that independency is likely to be affected by how well the client is able to continue learning after the consultant leaves. The client needs to facilitate for efficient knowledge sharing within the organization. Furthermore, management should encourage and engage employees to contribute to organizational learning. A mutual understanding and agreement about organizational learning and development should be a part of the organizational culture.

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The theme for this thesis is the relationship between client and consultant, a topic that has been interesting and an educational experience for us. The interviews that were conducted in Iceland formed the foundation for this research. We will therefore like to thank the informants that took the time meeting with us, and for giving valuable insight into the projects.

We would also like to thank our supervisor Throstur Olaf Sigurjonsson, for support and guidance throughout this semester. In particular for his rapid responses, valuable insight into the scope of this research, and his reactiveness when things got challenging.

# 1. INTRODUCTION

# 1.1. Background

Information systems are becoming an increasingly important component in a company's overall business strategy. IT-related developments represent a growing proportion of investment for many organizations in both the private and public sectors. Enterprise software developed by well-known organizations such as SAP, Oracle, IBM and Microsoft provide business-oriented tools in order for companies to improve operations. These tools, also known as information systems, can increase efficiency and facilitate greater and more informative decisions, and therefore create a competitive advantage for companies (Porter, 2008; Piccoli and Ives, 2005). Organizational areas such as sales, marketing, customer service and finance, initiate IT projects in order to improve customer relationships, increase revenue, improve communications, consolidate information sources, and increase efficiency of business processes.

Firms experience mixed success at realizing economic benefits from their investments in information systems (Marchand and Peppard, 2008). Despite several technological success stories, the development and implementation of IT systems remains problematic and can present a catalogue of difficulties (Bloomfield and Danieli, 1995). These difficulties have lead to a continuous search for better tools and techniques, as well as companies seeking professional

expertise. The usage of external IT-consultants has become a natural part in order for companies to establish well-functional information systems. Consequently, this has lead to a growth in the IT-consulting industry (Bloomfield and Danieli, 1995; The Nordic Consulting Market, 2014). Some clients use external consultants to solve particular problems, others because they need new impartial opinions in a decision-making process. Sometimes firms employ consultants because they are involved in a crisis, and need external expertise to assist in the crisis (Poulfelt and Paynee, 1994). In regards to IT-projects, most companies do not have the ability or resources to complete a technological change without external assistance. As a consequence of experiencing shortages of inhouse technological expertise and difficulties in acquiring information about new software developments, companies become more dependent on using external knowledge.

A topic that has recently received attention in the media is how dependent companies become on consultants after they have assisted in projects (Lindeberg and Riise, 2015). The consultants continue to play a central role in the company's daily operations: both in regards to the latest conducted project and various support-activities, and how clients tend to use the same consultancy company for future projects (Lindeberg and Riise, 2015). This dependency can affect clients because consultants become impartial, and the otherwise advantage of having an objective role becomes impaired (Lindeberg and Riise, 2015).

When using consultants, organizations typically have goals that go beyond the successful implementation of a new system: they also have the less tangible goals of acquiring knowledge in regards to implementation, operational, maintenance, and training (Ko, Kirsch and King, 2005). These intangible goals are what we seek to gain a deeper understanding of in this thesis, in order to evaluate the relationship between clients and consultants in the aftermath of an IT-project.

We aim to investigate factors that might influence or reinforce this dependency, by evaluating two recently conducted IT-projects from two independent IT-consultancy firms in Iceland, Reykjavik. We are interested in finding out how the transfer of knowledge between clients and IT-consultants as well as knowledge transfer within the client company occurs in practice. Furthermore, how the change process has been conducted, and what type of relationship there has been between the client and the consultant are of interest to our research. In addition we want to evaluate what actions are taken in order for the clients to become independent of the consultants.

### 1.2. Research question

We wish to increase our understanding of the client-consultant relationship, and want to combine strategic management subjects from previous courses, both from our bachelor's at BI the Norwegian Business School, and master's at Copenhagen Business School. We will explore the fields of knowledge management and change management, and research based on the relationship between client and consultant. By evaluating IT-projects we will also include a future oriented subject, namely the field of information management. We want to increase our understanding of both the client and consultant perspective of a project, preparing us for future careers within the consulting industry. Based upon our motivation, interest and accessibility to perform a case study of two IT-projects in Iceland, we have formulated a research question that will be used to guide our research:

Which aspects in the client-consultant relationship can shape how independent the client becomes from external consultants after the execution of an IT-project?

By investigating this research question we limit ourselves to not focusing on the tangible elements that form the foundation in projects, such as contract-design, budgets or the quality of the IT-system. This research however, mainly concerns the intangible, human aspects of the relationship between the client and the consultant.

#### 1.2.1. Sub questions

We have developed three sub questions in order to help guide this research-question. The first sub question is *How has the change-process been unfolded, compared to traditional change management theory?* By answering the first sub question we hope to gain a clearer understanding of the change process. By linking the projects to traditional change management theory, theory that concerns successful how to accomplish a successful change, we are better suited to measure how successful the projects have been based on acknowledged best practices. Answering this question can hopefully also reveal potential sources that can influence how independent the client becomes from external consultants after a project.

It is established that knowledge sharing is crucial during a change process. The second sub question will be helpful in order to understand how the knowledge transfer has been during the projects:

How have the different parties involved in the projects affected the knowledge sharing? When using

external assistance, the knowledge has to transfer from the consultant to the client, and then the client has to be able to apply the assimilated knowledge into the newly implemented system. Inefficient knowledge sharing will affect how well the client is able to use and get full utilization of the system, which again will influence how independent the client becomes from external consultants.

The third sub question that will help guide the research question is: *How can human aspects in the client-consultant relationship affect the success of the project?* This sub question is developed to guide an investigation of the relationship between the client and consultant. An understanding of the relationship is likely to reveal additional information about the change process and the knowledge transfer.

These three sub questions will help structure this paper, by providing three main theoretical pillars namely change management, knowledge management and relationship. Our hypothesis is that *the basis for good knowledge transfer occurs already in the initial phase of the project, when client and consultant establish a relationship*.

#### 1.3. Motivation

Theories within knowledge management and change management are especially relevant, not only in today's society, but for us as we are about to start our professional carriers. Knowledge management is a research field that will always be current: how actively a company manages knowledge will influence learning within the organization, facilitate its decision-making capabilities and stimulate cultural change and motivation. Furthermore, knowledge sharing is important in order for a company to extract the maximal value from their intellectual assets.

Having an in-depth knowledge within change management will give an advantage both in professional and personal life. Increased knowledge within change management can give valuable insight for future organizational change processes. This valuable insight may be that change needs to be carefully planned and managed, and that the implementation process should be communicated in advance to all involved parties. This awareness may reduce the possibility of unsuccessful change processes in the future. Furthermore, it will increase the knowledge about the importance of maintaining enthusiasm, motivation, morale and productivity during a change process.

Recent media attention towards the extensive use of external IT-consultants has marked itself in the Norwegian society: NAV (the Norwegian Labour and Welfare Administration) experienced difficulties in justifying an eight-year-old relationship with Accenture, an external consulting firm. Words like dependency and efficient cooperation are cited as reasons. This criticism caught our interest. We wanted to investigate why companies become dependent on consultants in the aftermath of a project. In addition, informational technology has marked itself as an important part of the future. This is the reason for choosing to look at the implementation of an IT-project: to develop knowledge regarding these types of projects and the dynamics and processes that take place.

# 1.4. Defining technical terms

As a result of this thesis being more focused within the field of strategic management than information technology management, we have tried to limit the usage of technical terms. However, some terms are necessary to include in order to capture the essence of the projects. Definitions of these terms are to be found in the following section.

#### 1.4.1. ERP

Enterprise Resource Planning (ERP) systems are highly complex information systems (Umble, et al., 2003). ERP is an evolving concept that originates from manufacturing systems (MRP), which was developed for inventory control in the 1960's (Chopra and Meindl, 2013). ERP is however characterized by resource planning for the entire enterprise, and facilitates the operations of an organization by streamlining business processes and integrating business functions (Chou et al., 2014). Areas such as production design, information warehousing, material planning, communication systems, human resources, finance and project management could be integrated into one technological system. The ERP systems gained rapid growth during the early 2000's. Even though information systems can be other IT-systems than ERP, a large body of literature has been written in regards to this concept. Because of this extensive, and recent research, we find it valuable to look at research on implementation of ERP-systems, statistical models and theories for this thesis. However, it should be noted that ERP systems can deviate from other information system solutions, and that this can be a possible pitfall for the usage of these theories in this thesis.

#### 1.4.2. Scrum

Scrum is a project management tool that is primary used for software development in small-to-medium sized projects. When using scrum method the users shall experience increased tempo, improvement in responsiveness, increasing communication and reduction in risk (Pries and Quigley, 2011). The goal is to shift focus from a large unorganized list of different tasks and concentrate on a limited number of tasks within a short planning horizon. The scrum approach focuses on being time-efficient, avoiding procrastination and most important of all, the fact that project plans are forbidden (Pries and Quigley, 2011). Furthermore, the scrum approach engages individuals in a group to work as a team towards collective goals, instead of an unstructured group of people. The scrum method has several distinctive characteristics, as opposed to traditional project management.

Furthermore, there are three important roles in the scrum approach: the product owner, the scrummaster and the team. The product owner is responsible for maximizing the value of the product and the work of the development team. The product owner is the "customer", who is an external person not part of the development team, which orders the product being developed. If the product owner shall succeed, the entire organization needs to respect the product owner's decisions. Teams solely work from a given set of requirements from the product owner, and are prohibited to work from instruction from anyone else. The responsibilities of the scrum-master are to make sure that the scrum is understood and enacted upon in the team (Scrumguides.org, 2015). The scrum-master does this by making sure that the scrum team follows the scrum theory, practices and rules. Other responsibilities are to make sure that the entire organization understand and see the value of practicing scrum.

Other responsibilities include being in charge of facilitating the different scrum events, coaching the development team and the rest of the organization in its scrum adoption.

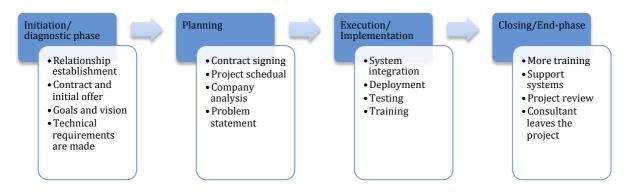
The organization of scrum is through sprints: Pre-agreed events that are used to create regularity and minimize the need for additional meetings. In order to create efficiency, all scrum events are time-boxed, which implies that each event has a maximum duration. As soon as the sprint is completed a new sprint begins where a different product is created. Each sprint is thereby specified with regards to products, design, planning, the work and the resultant product. Sprints consist of a sprint planning, daily scrum meetings, the development work, the sprint review and the sprint

retrospective. During the sprint it is crucial that no changes are made that could endanger the sprint goal, that the quality of the product does not decrease, and that the scope of the project can be altered as more is learned about the product. By clarifying or re-negotiating between the product owner and the development team the alterations can be made (Scrumguides.org, 2015).

The daily scrum meetings are characterized by being very goal driven with a focus toward not wasting time. The meetings are therefore highly focused, and last only for fifteen minutes. During these meetings, the scrum-master will ask three very simple questions: What did you accomplish yesterday? What are you accomplishing today? And what are the obstacles you are encountering? (Pries and Quigley, 2011). By focusing on what the team members have accomplished yesterday, and will accomplish today, the team gains a better understanding of what work has to be done and what work that remains. In these scrum meetings other questions and discussions are not explicitly forbidden, but they are not encouraged either. Lastly, the purpose of the daily scrums is to improve communications, eliminate other meetings, identify impediments to development for removal, promote quick decision-making and improve the developments team level of knowledge (scrum.org, 2015).

#### 1.4.3. Defining each phase in an IT-project

Research literature use several terms when referring to the various structural phases in the consultant project implementation. We will clarify the activities within the different phases, and the terms that are used in this paper. These definitions are collected from Schwalbe's (2009) book about information systems and project management. In addition, some of the terms are collected from our interviews in Iceland.



#### 1.5. Structure of the thesis

The structure of this paper is constructed in a manner we find most suitable for providing the best overview. The following chapter is a theoretical review where we visit theories from change management, knowledge management, and lastly research that concerns the client-consultant relationship. The next chapter is the methodology. Here we will construct the theoretical framework and associated considerations to theory. Furthermore, the methodology includes the choice of research method, how we have conducted the research and reasons for executing it in that particular way. Furthermore, this chapter includes limitations and a critical discussion of data. The next chapter is a structured presentation of our findings. This chapter is structured around themes that were developed and acknowledged in the methodology chapter: the initiation phase, resistance to change, knowledge of the consultant, communication style, training, knowledge sharing within the client company, expectations and trust, and current status of the project and client satisfaction. In the next chapter, we will discuss our findings using the same structure as when we presented the findings, by using these above-mentioned themes. In the next chapter we seek to answer the three sub questions. In conclusion to this thesis we use our answers from the three sub questions to answer the research question. Lastly, we will include our recommendations for further research.

# 2. THEORETICAL REVIEW

The theoretical framework is created with the aim of exploring the research question *Which aspects in the client-consultant relationship can shape how independent the client becomes from external consultants after the execution of an IT-project?*, by conceptualizing perspectives within strategic management. By linking theories of change management to theories within knowledge management, we gain an understanding of the knowledge transfer during a change process. The implementation of an IT-system will require great changes within the client company, and the exploration of change management theory will therefore be relevant to increase our understanding. Furthermore, organizational changes will affect traditional processes and routines within the firms, and organizational learning will be central to achieve a successful change. Knowledge management theories will be central for understanding organizational learning capabilities and knowledge transfer. Keeping the research question in mind, it will be of interest to evaluate the client and the consultant's roles during the change process, the cooperation, and characteristics of their relationship. Scientific research within the client-consultant relationship will therefore be relevant for investigation. The relationship between the client and consultant is likely to affect the change

process and knowledge transfer, which again can influence how dependent the client becomes in the aftermath of the project.

The purpose of this chapter is to enrich our research and provide us with focus points from which we can understand and further explore our findings. We will begin by exploring traditional theories within change management; evaluating best practices for successfully conducted change processes. Secondly, we will explore research in regards to knowledge management to establish a framework that is suited for this research, which captures elements that simulate knowledge transfer between client and consultant. Lastly, research done on the relationship between the client and consultant will be explored.

#### 2.1. Traditional Change Management Theory

Change is the process of assisting individuals and organizations in passing from an old habit or path, to a new way of doing things. Managing organizational change can be challenging: The implementation of change has to be handled in such a way that it minimizes employee resistance and costs, while still maximizing effectiveness within the organization (Inc.com, 2015). However, the brutal fact is that about 70% of all change initiatives tend to fail in some way or another (Beer and Nohria, 2000). When it comes to corporate changes, some are very successful while others are complete failures, and most change initiatives fall somewhere in between success and failure, with a distinct tilt toward the lower end of the scale (Kotter, 2007). Furthermore, Pfeffer and Sutton (2006) identifies that most of ERP implementations will use double of the estimated time to implement the system, and that the total costs will be twice as high compared to what was planned. A change process goes through a series of phases, before reaching an end. This requires a considerable length of time. Kotter (2007) believes that the reasons for unsuccessful transformation efforts can be anchored in that firms skip steps, only creating an illusion of speed and therefore fail to achieve results. Furthermore, lack of experience in management is also recognized by Kotter (2007) to be a reason for why firms fail to make changes. Furthermore, Elving (2005) highlights the importance of communication for effective implementation of organizational change.

#### 2.1.1. Defining change

Change management is defined in various ways. Blackwell Encyclopedia (Blackwellreference.com, 2015) informs that change management should be viewed not as a distinct principle, but a concept that draws upon on a wide variety of social sciences and management theories. Change

management is broad concept, which is conceptualized by many theorists trying to establish a mutual understanding. Change management in general terms can be described as an approach where individuals, teams, departments and organizations are transitioned into a desired future condition (Eby et al., 2000). Numerous of researchers and people in academia have devoted their time to the concept of change management. Some have researched pitfalls in organizational change and the role of management in this process, while others have developed frameworks for optimal change processes. Furthermore, change management has become a relevant concept for consultants: Fincham (1999) describes that "the expansion of consultancy may be seen as occurring in the context of the growing competitiveness and complexity of organizational life". Furthermore, Fincham (1999) writes "global markets are no longer turbulent in some quadrants, but turbulent in all, and organizations are required not just to evolve and adapt, but also to change radically and redesign themselves fundamentally". According to Beer and Nohria (2000) the reason for most failures is that in "their rush to change their organizations, and managers end up immersing themselves in an alphabet soup of initiatives. They lose focus and become mesmerized by all the advice available on why companies should change". These statements clarify the importance of the role of management, and that there are many considerations to take into account during a change process.

#### 2.1.2. Change management frameworks

Before diving into the field of change management it is important to have a clear understanding of what change actually is, and what significance it has on an organizational level. Eisenback (1999) has a clear and well-cited definition "change by definition, requires creating a new system and then institutionalizing the new approaches". In recent years, many pioneers within change management have focused their research towards the importance of culture, motivation, trust and leadership, also known as "soft issues" in a change process (Sirkin et al. 2005). Furthermore, Sirkin et al., (2005) continues by highlighting the importance for what is known as the "hard factors", such as numbers, budgets, duration of projects, performance integrity and commitment. Only managing the soft aspects will not guarantee success in a transformation project, because they do not directly influence outcomes of change programs (Sirkin et al. 2005). The importance of the hard factors are easily communicated and measured, both for people involved in the company, and for individuals outside the organization, like for example an external consultant. However, as the research by Sirkin et al. (2005) suggests the hard factors are equally important as the soft factors in a change process. Their research revealed that, in contrast to popular opinion, that projects with longer

duration are not necessarily the ones that will fail. In the longer-lived projects there is a general fear that the level of enthusiasm will decline, motivation and interest will sink, key personnel will disappear and problems will appear (Sirkin et al. 2005). However, as the research indicates, longer-lived projects have a higher success rate than short-lived projects as long as the project reviews in the longer-lived projects are at a frequent interval. Project reviews are status checks, with intentions to evaluate and monitor the project progress. The research conducted by Sirkin et al. (2005) has shown that "the probability that change initiatives will run into trouble rises exponentially when time between reviews exceeds eight weeks" (Sirkin et al. 2005).

The project team's performance integrity is its ability to complete the initiative on time. This is dependent on the skills and commitment of the managers, supervisors and employees, and how reliably these individuals are in respect of successfully and efficiently executing their different tasks. The commitment is a two-folded issue, where one part focuses on to what degree top management is behind the change initiative, and their ability to communicate the reason for change and the importance of its success. The second aspect is focused towards local-level commitment: "Do the employees most affected by the change understand the reason for it and believe it's worthwhile?" (Sirkin et al. 2005). Furthermore, a crucial thing in a change process is the attitude of the employees: are the employees enthusiastic and supportive about this project, or worried and obstructive? If the employees have the latter attitude towards the project, this is likely to create a resistance within the organization, which in the end can contribute to failure of the project (Sirkin et al. 2005). The change in effort of the employees during a change process also plays a significant role of the success of an implementation. All these things that are discussed above are incorporated into a framework, which is abridged to D.I.C.E (Duration, Initiative, Change, Effort). If used properly, the framework can propose a project' score and give a prediction about the success rate of the project. "Companies can choose to compare a projects score with those of past projects and their outcomes to assess if the project is slated for success or failure" (Sirkin et al. 2005).

In regards to organizational change there are different views on what leadership style matches different situations. Garvin and Roberto (2005) discuss how change by persuasion can work in some organizations. Within the older literature, Kotter (2007) has developed a framework that identifies eight steps to transforming an organization. These steps are developed in order to prevent

the failure of transformation efforts, and form a framework that is developed for management to successfully change the organization.

#### Kotter's framework

In one of *Kotter's* most famous articles from 2007 he presents eight steps to transforming an organization. A summary of the model is presented in figure 1. *The first step* concentrates on establishing a sense of urgency. "Most successful change efforts begin when individuals or groups start to look hard at a company's competitive situation, market position, technological change and financial performance" (Kotter, 2007). It is also necessary that this group is able to communicate and influence management, so that changes can be conducted. Furthermore, management continuously needs to identify and discuss crisis, potential challenges or major opportunities. The *second step* is called "forming a powerful guiding coalition". In this step, it is recommended assembling a group with enough power to lead the change effort. According to Kotter's observations (2007) every successful transformation has a guiding coalition. The management should encourage the group to work together as a team. In most cases senior managers will form the core of the group, but as diversity within the group is desirable, there should also be employees holding other positions in the organization.

The *third step*, named "creating a vision" is a very important part of the initiation phase of a project. To be able to shape a vision that will steer the change process, and develop strategic initiatives to achieve that vision (Kotter, 2007). This guiding coalition is lead by the organization's vision and their strategy. "A vision says something that helps the direction in which an organization needs to move" (Kotter, 2007). The vision will help in directing the change process. In this stage there should be developed a strategy for achieving that vision. In the *fourth step*, the project leader should be focused towards communicating the vision. In this stage all channels and vehicles possible should be utilized in order to communicate the new vision and strategy. There is also a great importance on teaching new behaviours by the example of the guiding coalition. This importance stems from statistics which show that visions only occupies .0005% of the total yearly communication (Kotter, 2007). To prevent this, executives use all existing communication channels to broadcast the vision. "They turn boring and unread company newsletters into lively articles about the vision" (Kotter, 2007).

The *fifth step* "empowering others to act on the vision", is about getting rid of obstacles to the change that undermines the vision. According to Kotter (2007), an employee is likely to understand the motives behind the change, and wishes to contribute in the process, but something appears to be blocking the path for change. These obstacles can be differences in mind-sets amongst the employees. These obstacles can result in user-resistance, the individuals involved in the change process trying to prevent it, or obstacles associated with the organizational structure of the company. The sixth step "planning for and creating short-term wins" is all about keeping a positive energy in the change, and making sure that the employees involved maintain a strong drive for the project. Real transformation takes time, so if there are no wins along the way the organization risk people losing faith and motivation in the project. Most people will waive from the change effort if they do not see compelling evidence within 12-24 months that the change effort is producing results (Kotter, 2007). This can result in that the employees loose interest in the project, which may result in that people actively join those people who have been resisting change (Kotter, 2007). An important aspect of this stage is to understand and recognize the difference between the creation of short-term wins and hoping for short-term wins. Management needs to consciously work towards creating short-term wins and reward and recognize the employees involved in the improvements.

The *seventh step* in the framework is "consolidating improvements and producing still more change". Kotter (2007) has found that "premature victory celebration kills momentum". Instead of declaring victory, leaders of successful changes should use the creditability afforded by the short-term wins to tackle even bigger issues in the organization. Furthermore, the leaders should use this increased credibility to continue to change the systems, structures and policies that don't fit the vision. The leaders should also focus on "hiring, promoting and developing employees, who can implement the vision" (Kotter 2007).

The *eight* and last step in Kotter's (2007) framework is "institutionalizing new approaches". The changes need to be incorporated in the foundation of the corporate body, and until new behaviours are rooted in social norms and shared values, they are subject to degradation as soon as the pressure for change is removed (Kotter, 2007). In order to avoid the error of not anchoring changes in the corporation's culture, a conscious attempt should be made to show people how the new approaches, behaviours, and attitudes have helped to improve performance (Kotter, 2007). Also, the management should take sufficient time to make sure that the next generation of top management

really does personify the new approach (Kotter, 2007). If not the organization risks the future management making decisions that undermine the hard work executed by the organization.

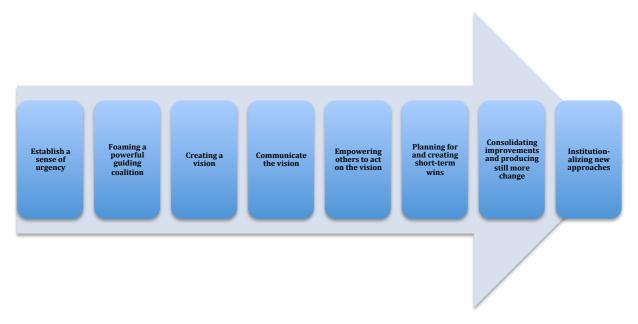


Figure 1 illustrates Kotter's eight steps for successfully handling a change process

#### 2.1.3. Techniques for leaders involved in change processes

Heifetz and Linsky (2002) have developed a framework that shares similarities with Kotter's eight-step framework. Their "survival guide for leaders" focuses more on the human- and the psychological aspects of people involved in change processes. The article presents several techniques a leader can utilize. The authors define the process of organizational change as "leading major organizational change often involves radically reconfiguring a complex network of people, tasks, and institutions that have achieved a kind of modus vivendi, no matter how dysfunctional it appears to you" (Heifetz and Linsky, 2002). They continue by stating "when the status quo is upset, people feel a sense of profound loss and dashed expectations" (Heifetz and Linsky, 2002). They argue that the employees often will go through periods of feeling incompetent or being disloyal in periods of change.

There are several different techniques that are recommended for leaders leading change. One of these techniques involves identifying opponents in the organization, and knowing what your opponents are thinking. There can by many different opponents in an organization: team leaders, key-users and even top management. By knowing, or at the minimum having a general idea of what

these opponents are thinking can help towards challenging them more effectively and hinder and prevent their attempts to upset your agenda (Heifetz and Linsky, 2002). By knowing what your opponents are thinking a leader can reap benefits by borrowing ideas that will improve his initiative. Heifetz and Linsky suggest leaders keeping close relations with the individual most dedicated to see you fail. By attempting to have a relationship with open communication the leader will have a better overview of this person's ulterior motives. Furthermore, they also suggest what a leader should do in order to neutralize potential opposition, which is to "acknowledge your own responsibility for whatever problems the organization currently faces" (Heifetz and Linsky, 2002).

Brown and Eisenhardt (1997) have identified characteristics of successful managers in continuously changing organizations. Their research has showed that successful managers provided clear responsibility and priorities with extensive communication and freedom to improvise. Kurt Lewin has also looked at the human aspect of change (Burnes, 2004). By the change management community he is regarded as the "founder of social psychology" and has developed a three-stage theory of change, most commonly referred to as "unfreeze, change, freeze". There has been a lot of development in the field of change management since this theory was presented in 1947. Even though the theory has been criticized for being too simplistic, the consensus is that the theory is relevant and applicable in today's business environment.

The first stage in the process "unfreezing" is the most important phase and is about preparing the organization for change. Ideally, a situation where there is a sincere want for change will be created. In order to create this sincere wish, there should be created a sense of urgency within the organization. The higher sense of urgency for change, the more motivated the employees will be for the change. The leader should attempt to weight the advantages and disadvantages for change against each other, and only move forward if the positive side outweighs the negative. If the disadvantages for the change outweigh the advantages, there is likely to be a little motivation within the organization. According to Lewin (Burnes, 2004), this will result in that the employees will feel forced to contribute to the change, and naturally be very uncooperative. Kurt Lewin calls this the "Force Field Analysis". In sum, the first phase is about "moving ourselves, a department or an entire business, towards motivation for change".

The second stage of the model occurs when the organization executes and implements the changes. It is described that people are "unfrozen" and moving towards a new state in this phase. People tend to be unsure and fear changes. Therefore the leader should be persistent and continue communicating how the changes are envisioned and how the employees will benefit from the changes. In this manner they will not loose sight of where they are headed. This is quite similar to Kotter's third, fourth and fifth step (Kotter, 2007). This phase is, much like the previous phase, difficult because the changes are likely to be met by resistant employees because they are likely to not truly understand how the changes will benefit them. Therefore, the management team needs to take a supportive role in order to try to understand the employees. This is very important in order to keep the energy and motivation up amongst the employees involved in the project.

In the third phase "freezing" the main focus is to establish a sense of stability once the changes have been made. The ultimate goal is that the changes are accepted and become the new norm in the organization. This last step has received some criticism for not being relevant in today's business environment, because processes have become extremely quick and organizations are in continuous change. This continuous change does not allow people to become comfortable in their routines and habits. In today's world where flexibility and ability to change are valued, respected researchers have suggested to move away from freezing and rather regard elements as being more flexible important in this final stage of the process.

Garvin and Roberto (2005) on the other hand suggested a more straightforward approach. They have researched and described the different phases in a persuasion campaign. A persuasion campaign is according to the authors best suited for organizations in serious crisis, sometimes on verge of bankruptcy, and with a need of radical change. They compare a persuasion campaign to a political campaign, where there is a need to differentiate from campaigns in the past. The four phases in the persuasion campaign are described as firstly having to convince employees that radical change is imperative, and demonstrate why the new direction will improve operations (Garvin and Roberto, 2005). This first phase is quite similar to Kotter's first step in the eight-step framework for successful transformation processes stating that creating a sense of urgency in the organization is essential for success. Garvin and Roberto's (2005) description of the second phase, is to position and frame a preliminary plan and then gather feedback in order to finally announcing the final plan. The third phase where leadership should "manage employee's mood through constant

communication" (Garvin and Roberto, 2005). The reasoning behind this is that change is sometimes associated with restructuring and downsizing, which can be depressing events. "Relationships are disrupted, friends move on and jobs disappear" (Garvin and Roberto, 2005). Leaders must pay close attention to the employees and work hard to preserve a receptive environment for change. The last phase focuses on reinforcing behavioural guidelines to avoid relapsing. Garvin and Roberto (2005) have found that in successful turnarounds the leaders continuously reinforce organizational values, using actions to back up their words. In order to succeed at doing this the leader must actively prioritize and diligently signal to the employees that the new values are an important part of the organizations strategy, and should be respected and incorporated into the organizational culture.

#### 2.1.4. The assumed role of the consultant in a change process

We now turn to investigate the consultant's role in the change project. Belkhodja et al. (2012) claims "consultants are a main source of supply of ideas; while their part is to create the illusion that their solutions work". Others describe consultants and their role as not only handling analytical and technical aspects of the problem, but also having to supply a reassuring sense of control to the client organization. By doing so the consultant will contribute to reducing uncertainties that exist within the client organization (Sturdy, 1997). The interviews and research performed by Belkhodja et al. (2012) showed that the consultants view the process as a collaborative process, involving both the consultant and client organization. Some of the interviewees in their research mentioned that they view their role and obligations as a consultant to have to work hand in hand with their client, suggesting a quite close and intense relationship. Others reaffirmed their "total commitment to helping the client reach his objective asserting that the consultant is mainly a supporter who has a mandate to achieve" (Belkhodja et al., 2012). In the research performed by Belkhodja et al. (2012) one consultant (consultant D) was especially interesting. He was an active consultant within change management and information technology. Among other things, consultant D stated that if there were mutual distrust within the client-consultant relationship, it would increase the resistance to change and negatively affect the outcome of the project.

#### 2.1.5. The assumed role of the client in a change process

In the course of the typical change process where a client seeks external expertise, the client can be described with various characteristics. Schein (1978) has attempted to categorize the different types of clients observed in consultancy projects. The client organization can have just one, or in many cases all types of clients within the organization. The contact client is the individual who first

contacts the consultant with a request, question or issue. The intermediate clients are the "individual or groups, which get involved in various interviews, meetings, and other activities as the project evolves" (Schein, 1978). The primary clients are the individuals who ultimately have the responsibility for the problem being worked on. The indirect clients are members in the organization, although not included in the project will be affected by the change. As a result the "indirect clients" may feel either negative or positive about the change process (Schein, 1978). The ultimate clients consist of the entire organization and all its individuals, which the consultant cares about and "whose welfare must be considered in any intervention that the consultant makes" (Schein, 1978).

# 2.2. Knowledge management

Implementation of new information systems is a knowledge-intensive activity (Tiwana, 2003; Wang et al., 2007). The implementation involves experience and knowledge various participants, and requires that many different personalities interact extensively during the implementation process. Knowledge management will therefore be of great interest in all phases of an information system project (Sedera, 2009). However, according to Rubenstein-Montano et al. (2001) "knowledge management is a young discipline for which a codified, generally accepted framework has not been established". We will therefore visit models from several theories in the field of knowledge management, in order to establish a framework that can guide our research question.

#### 2.2.1. Defining knowledge management

Knowledge is a complex concept with countless interpretations and meanings (Nonaka, 1994). Karl Wiig became one of the pioneers in the field of knowledge management when he coined the concept in 1986 (Sverlinger, 2000; Wiig, 1997). However, the field of knowledge management is not revolutionary for our time. People have been practicing knowledge management from the time when the earliest civilization evolved (Xu et al., 2008). Knowledge management is however an emerging field for scholars (Rubenstein-Montano et al., 2001). In recent years, a large body of literature within this field has been of great interest to researchers and scholars (Xu et al., 2008). Researchers define knowledge management in dissimilar ways (Schultze and Leidner, 2002). For example, Davenport, Long and Beers (1998) defined knowledge as "information combined with experience, context, interpretation, and reflection: It is a high-value form of information that is ready to be applied in decisions and actions". In organizations, knowledge often becomes embedded not only in documents, but also in organizational routines, processes, practices and norms

(Davenport and Prusak, 1998). Rubenstein-Montano et al. (2002) adds that organizational knowledge is the "creation of value from an organization's intangible assets". As is often the case with vague concepts, it is difficult to find a clear, well-established definition (Sverlinger, 2000) and consequently, there are many different ways to define the term of knowledge management. Sverlinger (2000) creates a common definition based on various scholars, and defines knowledge management as a "process of getting the right knowledge at the right time, to the right people so it can be of the greatest possible value for the organization".

In order to evaluate the knowledge transfer in the client-consultant relationship, we need to develop an understanding of what characterizes an efficient knowledge sharing. A considerable amount of research on knowledge management assumes that effective knowledge transfer has positive implications for organizations (Schultze and Leidner, 2002). However, if knowledge sharing is not managed well, it can result in companies not achieving optimal results from their IT-investment (Marchand and Peppard, 2008; Butenschøn, 2015). Effective knowledge transfer is in place when the consultancy company is able to leave the prospective client in a situation where the client is able to maintain and evolve its own information system, and thus leading to a better fit between the system and the client's processes (Davenport, 2000). In regards to knowledge management in the context of a project, Reich et al. (2008) defines knowledge management as "the application of principles and processes designed to make relevant knowledge available to the project participants". Reich et al's (2008) definition is of great interest because it highlights the processes for knowledge sharing.

The potential knowledge sharing in an IT-project will be of a different art than in other knowledge sharing processes: It requires that the participants in the project has knowledge in regards to software application, information systems, as well as business processes in general (Schwalbe, 2009). There is an extensive and mutual knowledge sharing in the client-consultant relationship. External actors bring new knowledge on software and "best-practice" business processes to share with the client organization (Davenport 1998), and the client organization shares organizational business process knowledge with the external parties (Sedera, 2009).

There can be many reasons for why knowledge sharing in technological projects can be difficult. A reason that is acknowledged by several researchers is difficulties in merging knowledge from different sources and from people with different professional backgrounds (Chan and Rosemann,

2001; Wang et al., 2007). Furthermore, programmers who develop and install information systems tend to use a different "language" than consultants and key-users (Butenschøn, 2015, Schwalbe, 2009). This makes the knowledge sharing in information system processes difficult, since this process is dependent on many different stakeholders with very different backgrounds, and the cooperation between the participants suffer. Learning and teaching is important in all project phases. Knowledge is created and knowledge can be lost along the way. Effective knowledge management therefore facilitates the creation and integration of knowledge, minimizes knowledge losses, and fills knowledge gaps throughout the duration of the project (Reich et al., 2008).

### 2.2.2. Knowledge sharing from consultant

Researchers have found that an existence of a significant knowledge gap among stakeholders could potentially cause an unsuccessful implementation. Knowledge in regards to projects must flow from those who implement the system to those who are responsible once it is in production (Wang et al., 2007). In the client-consultants relationship it is therefore interesting to investigate the client's ability to absorb the external knowledge from the consultants, and the consultant's ability to share knowledge. Bessant and Rush (1995) state "firms differ not only in their technological competence, but also in their capability to absorb and assimilate new inputs of technology. Managing a complex process requires a high level of managerial skills and innovative capabilities on the part of firms". Wang et al. (2007) supports this statement and argues further that "effective knowledge transfer is assisted by the absorptive capacity of the learner and the competence of the knowledge holder", which is consistent in regards to the client-consultant relationship.

Cohen and Levinthal (1990) define absorptive capacity as "the firm's ability to recognize the value of new, external knowledge, assimilate the knowledge, and apply knowledge to commercial ends". According to Reich et al. (2008) is it important that knowledge is transferred, integrated, created and exploited in order to create organizational value. Firms should posses a high level of absorptive capacity to effectively value, assimilate, and apply the external knowledge acquired from consultants into their business process (Cohen and Levinthal, 1990). In regards to the implementation of an information system, the knowledge sourced from the consultants must be translated, adapted, and combined with knowledge of the client's business process and then adopted into the organizational routines specific to the client's context (Wang et al., 2007). The challenge with the knowledge transfer phases is that there is likely to be large individual differences in the processes. The underlying idea is that all firms have varying abilities to absorb external knowledge,

which makes it difficult to measure and anticipate for project management (Cohen and Levinthal, 1990). Individuals are very different when it comes to learning (Bransford, Brown and Cocking, 1999). A variety of knowledge management approaches needs to be employed in the organization to effectively deal with the diversity of different knowledge types and attributes (Alavi and Leidner, 2001).

#### 2.2.2.1. The competence of the consultants

The competence refers to the consultant's ability to solve the client's problems, to offer related and necessary knowledge, to mobilize various skills, and to help the client organize and develop value from the information system project (Sedera and Gable, 2009). Traditionally, consultancy companies have been seen as a linear activity, implying that the only role of the consultant is to transfer expert knowledge from supplier to user (Bessant and Rush, 1995). However, the role has changed over time. Today, the role of the consultant is subtler and has several other components, both formal and informal, which are increasingly being recognized as important in the process of developing both technological competence and managerial capability of the client company. Diversity in expertize among consultants can help bridging the knowledge gap, and is becoming normal in the IT-consultancy industry (Bessant and Rush, 1995). During a given project, the consultancy company will provide a mix of different consultants. Some of the consultants will supply knowledge in regards to programming and technical service, while other consultants will provide a more business oriented and managerial knowledge.

In order to evaluate the consultant's competence, we will explore the relevant literature regarding the different types of knowledge consultants can posses. Huber (1991) suggests that knowledge can be divided into three categories: declarative, procedural and conditional. Declarative knowledge is when an individual knows about something, for example facts, definitions, names and rules. For example, that the consultants have technical knowledge in IT-solutions. In contrast, procedural knowledge is concerned with how to perform a task or activity, for example, the consultant's knowhow about how to execute or implement an information system. The third category suggested by Hubert (1991) is concerned with conditional knowledge, information about when how to apply particular strategies for learning or problem solving. For example, it can be the consultant's knowledge in regards to how to actually conduct the project, implement the information systems, new organizational procedures, roles and responsibilities and strategic approaches. The latter two types of knowledge presented are likely to be based on the consultant's experience. Clients expect

consultants to bring all three types of knowledge in their services (Huber, 1991).

Moreover, a large body of the literature in knowledge management highlights two other types of knowledge, "explicit" and "tacit" knowledge (Osterloh and Frey, 2000; Nonaka, 1994). The explicit knowledge is impersonal and easy to understand with different codifications and small adjustments. Examples can be the clients accounting figures. On the contrary, tacit knowledge is more personal and individually embedded (Argot and Ingram, 2000), which makes it hard to formalize and communicate to other people. Tacit knowledge involves both cognitive and technical elements. For example, the cognitive part of the knowledge is the consultant's opinions, beliefs and values that will affect the consultant's viewpoint and choice of method in projects. The tacit knowledge therefore requires more from both the receiver and the sender in order to establish efficient knowledge transfer (Argot and Ingram, 2000). The technical elements, involve explicit information and knowledge in regards to the specific context (Dawes, Lee and Midgley, 2007). The technical elements can in this case be the consultants' knowledge about the information system and its purpose, and opportunities the system brings to the company's business model and strategy. Nonaka (1994) argues that organizational knowledge is created during a mix of tacit and explicit knowledge. Jensen and Meckling (1995) have a similar distinction of different knowledge: General and specific knowledge where the general knowledge requires little effort to transfer, while the specific knowledge is more costly for both parties.

A model proposed by Bessant and Rush (1995) identifies different ways consultants can transfer knowledge to its clients, and contribute to bridging the knowledge gap, and improve the clients' operations. The model is built upon four guidelines in order for consultants to better ensure knowledge sharing to clients. The first way is the direct transfer of expert knowledge that has already been obtained and assimilated by consultants. Secondly, consultants can help through their role of experience-sharing, which is performed either implicitly or explicitly. The third way is called a "marriage broker", which provides users with a single point of contact through which a wide range of specialist services are offered, such as a technical support-service. Lastly, is the analytic or diagnostic role consultants play in helping users articulate and define their particular needs when it comes to innovation. They bring new and bright eyes into the challenges and opportunities. The consultant can play more than one role in a project, and by doing so help bridge the knowledge gap for the client-company. Volkoff and Sawyer (2001) argued that consultants can

help clients configure and derive value from information systems by providing both product knowledge and process guidance.

### 2.2.2.2. Direct knowledge transfer in the change process

In organizations, the knowledge transfer occurs in many forms. In addition to personnel involvement (Almeida and Kogut, 1999) and changes in organizational routines (Feldman, 2000; Feldman and Pentland, 2003), training and communication are highlighted as central features for knowledge transfer (Argote et al., 2000). Argote et al. (2000) continues by stating that these findings within knowledge transfer underscore the importance of relationships in knowledge transfer. In addition to moving knowledge from one unit to another, other main methods of knowledge transfer is to modify the knowledge of the receiver, primarily through communication or training (Argote and Ingram, 2000).

#### Communication

According to Elving (2005), "communication is vital to the effective implementation of organizational change". Furthermore, Elving (2005) states that poorly managed communication during change result in rumors and resistance, exaggerating the employee's negative aspects of organizational change. Reagans and McEvily (2003) argues that individuals who frequently communicate with each other are more emotionally devoted, and are likely to contribute more in knowledge sharing than those who infrequently communicate and are not emotionally attached. In addition, they believe that more frequent communication is likely to lead to more efficient communication because it will develop closer relationships through more frequent interaction between people. Roberts (2000) continue by arguing that the key ingredient in a successful technology transfer is the role of people who initiate and facilitate knowledge transfer in organizations through person-to-person communication. Consequently, all those things that encourage inter-personal communication affect knowledge transfer. Furthermore, Roberts (2000) point to the importance of face-to-face contact in order to establish and reinforce a relationship of trust between agents. Especially if the agents are from different cultures, geographically or socially.

#### **Training**

It is widely accepted that learning and knowledge transfer will occur only when the trainees have both the ability "can do" and volition "will do" to acquire and apply new skills (Tannenbaum and Yukl, 1992). Motivation is therefore central in regards for the employees to participate in training.

An employee with positive motivation is likely to demonstrate greater learning and positive reactions to training (Tannenbaum and Yukl, 1992). Knowledge transfer in organizational change occurs in a variety of mechanisms. Methods that can be used for knowledge transfer are lectures, meetings, presentations and hands-on training, i.e. a physical demonstration on how to do things, which gives room for the teacher to influence the way of doing things (Bender and Fish, 2000). Furthermore, according to Rouiller and Goldstein (1993), the organizational climate affects how well the training goes. According to Brown and Duguid (1991), training is about transferring knowledge from one person's head, to someone else who does not have the knowledge. Furthermore, Brown and Duguid (1991) argues that learning is about becoming an "insider" in a context, situation or community. The learners acquire a particular viewpoint and learn how to speak its language. Manuti et al. (2015) distinguish between formal and informal learning. Formal learning is defined as "structured learning that takes place "of the job" and outside of the working environment, typically in a classroom or educational setting" (Marsick and Watkins, 2001). In contrast, informal learning occurs in a situation that is not usually intended for learning, most notably in the actual work setting Manuti et al. (2015). The research by Manuti et al. (2015) indicates that in nearly all situations where learning takes place, elements of both formal and informal learning are present. Bender and Fish (2000) find positive effects when the trainer gradually gives the employees knowledge about a field in order to retain the knowledge within the organization.

#### 2.2.3. Knowledge sharing within the client company

In addition to the clients absorptive capacity; Tsai (2001) highlights the ability to successfully replicate new knowledge as an important feature in knowledge sharing. In this part of the theoretical review, we want to gain a deeper understanding of knowledge transfer within organizations. After a project or an information system is implemented the client needs to be able to control and use the new system, in order to gain full utilization of the implementation. According to Ko et al. (2005), the knowledge related to implementation of a new information system is complex and mainly tacit. As a result of tacit knowledge being difficult to observe, managers must rely on that the employees voluntarily share knowledge with each other. According to Fang, Yang and Hsu, (2013) inter-organizational knowledge transfer will propose a numerous of additional barriers. March (1991) mentions differences in individual learning as one reason for this. Theories and models that concern knowledge sharing within the organization will therefore be relevant to discover in order to evaluate the clients ability to ensure continued learning and development.

Chou et al., (2014) illustrates a model for knowledge sharing and identifies five factors that influence knowledge sharing for "ERP system usage", and how these factors can affect knowledge sharing between employees in the aftermath of the implementation. "ERP system usage" is when the client company is able to adapt the new information system into their business model, and the employee's start using the new system. Furthermore, the authors of this paper highlights that organizations often must alter their current work processes to fit with the new IT-architecture. The complexity of an information system makes it difficult for users to understand before the daily-users in the client company actual starts using the program. Based on this it can be argued that a considerable amount of the learning starts in the end of the implementation-phase, possibly after the consultants have left the project. Thus, learning and knowledge sharing between employees should receive attention. The model by Chou et al. (2014) includes the following five factors for knowledge sharing: knowledge sharing, extrinsic motivation, intrinsic motivation, self-efficacy and social capital.

*Knowledge sharing* between employees is highlighted as a vital component in the knowledge management process. When employees share ideas and experience among themselves, it can contribute to an increased learning environment.

*Extrinsic motivation* is when individuals have the motivation to engage in a certain activity or adapt behavior because it can lead to monetary rewards such as money or special perks. Sharing knowledge with others not only requires time and effort, but also could risk the loss of an individual's unique value within the organization. Therefore, knowledge sharing and organizational learning may happen only when an employee receives a reward that exceeds its personal cost. The reward can be tangible in terms of bonus, a promotion or an increase in wage.

Intrinsic motivation is when individuals experience a self-desire to seek new opportunities or challenges. It is driven by a personal interest or enjoyment in the task itself. The reward can be intangible in terms of that employee's feel more respected in their work environment, or that this particular activity will increase their reputation among others. For example, employees who provide useful knowledge to help co-workers would gain a personal sense of accomplishment. Thus, sharing knowledge with those who have need for it can intrinsically satisfy employees. The model assumes that individuals with high intrinsic motivation will be more willing to help their colleagues in the post-implementation phase, and that this will have a positive impact on knowledge sharing in the

company.

Self-efficacy refers to an individual's belief concerning their own ability to execute courses of action or controlling one's own performance of a specific task. Knowledge sharing is a process of social interaction and cooperation with other people. The model therefore purposes that individuals who have greater belief about their own ability will contribute more in a social context, and is therefore more likely to cooperate and disclose knowledge.

By *social capital*, the authors refer to an individual's social network: Ties, trust, and shared goals with others in a joint environment or social network. People's social networks and relationship with others impact the way they communicate and exchange information with others. For example, lack of trust between two colleagues will affect how they interact with each other. Further, it could hinder them from engaging in knowledge transfer, because they are uncertain of how colleagues could take advantage of the knowledge.

The model finds a positive correlation between knowledge sharing and intrinsic motivation, self-efficacy and social capital, but negative correlation between extrinsic motivation and knowledge sharing. An organizational change, such as the implementation of a new information system, integrates the complete range of business processes in a company. Social networks and relationships are therefore important for knowledge sharing in a change-process, because is requires that users work more tightly together, and that employees interact with each other. The model presented here emphasizes important elements to the knowledge sharing between employees, and is therefore of great interest.

Another model, proposed by Goh (2002), highlights different factors that influence effective knowledge transfer within a company. The framework consists of four main factors that are imperative for successful knowledge transfer. Firstly, the model point to organizational culture and trust between hierarchical subdivisions and groups in a firm, and the cooperation and collaboration among employees as critical factors for effective knowledge transfer. Secondly, Goh (2002) agrees with Chou et al. (2014), that personal motivation will affect how employees share knowledge in companies. Furthermore, in the third factor, Goh (2002) highlights the importance of employees' ability to transfer and receive knowledge, which is in line with what Wang et al. (2007) suggested about absorptive capacity and how it affects knowledge sharing between individuals. In the last factor Goh (2002) identifies the importance of distinguishing between explicit and tacit knowledge

for the methods used for knowledge sharing in companies. For example, it is argued that explicit knowledge can be transferred through technological and informal systems, while tacit knowledge should face an interpersonal transfer among employees.

In sum of knowledge management, several researchers and authors have agreed upon that it is necessary that both the client and the consultants contribute in knowledge sharing in order to succeed in the implementation. As the literature has illustrated, for the implementation of an information system to be optimal, the consultants must have sufficient knowledge about technology and business operations to offer its clients, as well as the clients must have enough absorptive capacity in order to learn from the consultant. Furthermore, when the knowledge is transferred a lot relies on the internal resources and ability of the client to continually maintain, develop and share knowledge in-house in order to become independent.

#### 2.3. The relationship between client and consultant

The client-consultant relationship has been described in various ways, and has been a subject that has contributed to a continuous debate among consultancy researchers (Weer and Styhre, 1997). Recent literature has described the relationship as if the "clients have become more sophisticated, and has intentions that are difficult to assess or understand" (Belkhodja et al., 2012). Furthermore, Alvesson and Johansson (2002) claim that large parts of the literature "points to clients manipulating consultants for their own managerial or political purposes, acknowledging the symbolic use of consultants". Although the relationship is defined in various ways, the consultants all share the same objective "to assist their clients in solving the issues they face by implementing change" (Belkhodja et al., 2012). Furthermore, explosive growth of the consulting industry in the last two decades, as a result of organizational trends in continuously restructuring businesses to keep a competitive position, has created various tasks for consultants (Bloomfield and Danieli, 1995; The Nordic Consulting Market, 2014). This, in turn implies that an expanding spectrum of new roles in the client-consultant relationship is created (Werr and Styhre, 2002).

#### 2.3.1. Client expectations

In addition to the scale and scope of the project, the objectives and expectations of the client influence the type of client in a client-consultant relationship. Ojasalo (2001) has identified three types of expectations a client can have when entering a consultancy project: fuzzy, implicit and unrealistic expectations. Firstly, a client has fuzzy expectations when the client has incapacity to clearly identify the mission's objectives and the change to be introduced. The client will therefore

also have difficulties when defining the consultant's roles and tasks. In such a case the result of the change process will seldom be perfect, as the consultant will experience difficulties understanding what the client really wants and expects. The consultant will therefore not be able to create and find the optimal solution. Secondly, implicit expectations refers to when a client does not define and clarify their expectations. In contrast to a client with fuzzy expectations, a client with implicit expectations is aware and has a clear idea of what to expect, and is able to identify the mission's objective. The client just does not communicate this to the consultant. Most often these are expectations, which the client considers so obvious and evident that the chances of achieving them are very high. As a result of these types of expectations consultants need to read between the lines and "take a proactive stance to clarify the clients' expectations" (Ojasalo, 2001). Thirdly, unrealistic expectations are expectations where the consultant cannot be held accountable if the expectations are not met and achieved. In regards to the client-consultant relationship is it therefore of great importance to clarify unrealistic expectations at an early stage in the project. Otherwise these expectations are likely to negatively affect the relationship. Furthermore, Greyser (1999) client expectations are linked with the reputation of the consultancy company. The client expectations will decline when a company's failure is exposed in the market.

### 2.3.2. Different types of client-consultant relationships

Weer and Styhre (2002) offer two views on the client-consultant relationship: the functionalist view, and the critical view. The functionalist view presents the relationship as one that exists on a contractual basis, with distance between the two parties, and the client being in control of the project. In the functionalist image the client is competent, and is able to be critical towards the advice and solutions given by the consultants. In the functionalist image the cause for using the consultants is a knowledge or resource deficiency within the client organization. On the contrary, in the critical view, there is a shift in power distribution compared to the functionalist view. In this view, the consultant is the controlling party in the relationship, and the client plays the part as a "naive, anguished victim of the consultant's persuasive strategies" (Weer and Styhre, 2002). In these types of relationships the authors highlights that the consultant by nature is a "manipulator of symbols in order to create impressions of value" (Weer and Styhre, 2002). Several researchers have described and categorized many different versions of a client-consultant relationship (Ness and Grenier, 1985; Schein, 1978). Schein (1978) has identified three broadly accepted models of consultation, purchase expertise, doctor patient and process consultation.

The purchase of expertise relationship is characterized by that the client is searching for a consultant to "provide independent perspective to bear on specific challenges at hand" (Schein, 1978). The client is not searching or expecting there to be a great focus on the human aspects in a relationship, such as building a strong relationship with mutual trust and shared values. The client would rather prefer that the consultant deliver expertise in a detached manner.

The doctor-patient model: In this type of relationship the consultant is required to apply a diagnostic approach in order to uncover the client's organizational problems. The consultant makes use of their toolbox consisting of their distinct experience, knowledge and diagnostic abilities so they can correctly identify strategic, organizational and in the case of this master's thesis technological problems (Schein, 1978). The doctor-patient model requires a strong relationship and developing trust between the client and consultant.

The process-consultation model: In this relationship the consultant acts more like a facilitator, and the client provides much of the expertise. Therefore, the consultant's role will to a large extent consist of providing a framework and a methodology for clarifying the clients problem and finding the best possible alternatives. The client has full control and is the one who in the end has the final decision regarding how to solve the problem.

#### 2.3.3. What recognizes a healthy and good client-consultant relationship?

According to Stumpf and Longman (2000) "a successful client-consultant relationship relies on the client's willingness to share authority with the consultant and to accept the establishment of a long-term relationship based on trust, collaboration, and information sharing". Furthermore, Argyris (1970) continues by stating that there is a general consensus that relationships between client and consultant are important in order to execute a successful project. He underpins this by claiming that the consultant who is not trusted is unlikely to be given accurate, reliable or valid information (Argyris, 1970; McGivern, 1983). Furthermore, McGivern (1983) informs that the need for trust, high levels of interaction and contingent methods are key facets of the client-consultant relationship. Moreover, Belkhodja et al. (2012) have discovered that in order to develop a relationship, which contains mutual trust, consultants are recommended to have great knowledge about the client organization. Furthermore, the client and consultant should develop a common set of assumptions and some common language (Belkhodja et al., 2012).

Belkhodja et al. (2012) have developed a model based on their findings. The model illustrates the contributions of both client and the consultant's characteristics when building a relationship. The first contribution is the identification of roles. When the different roles and expectations between client and consultant are clarified, a strong foundation for a long-term and healthy relationship is established. The completion of the first step will lead to a more efficient communication and better rhetoric between the client and consultant, which constitute the second step in the model. After the second step the relationship will move into a "higher emotional implication of both partners during the mandate" (Belkhodja et al., 2012), which forms the third step in the model. The fourth, and last step in the model is the point where the trust is established in the relationship. "Knowledge sharing and effective communication of expectations depends on the level of trust between the two parties" (Belkhodja et al., 2012). According to Solomonson (2012) trust is built when a consultant acts to increase feelings of shared values towards the client. This will in turn also increase relationship commitment.

#### 2.3.4. Dependency between client and consultant

Dependency can be defined as the state of relying on or being controlled by someone (Oxforddictionaries.com, 2015). Gable (1991) presents the reliance upon external consultants and states, "small businesses have a more difficult time attracting and retaining skilled information systems staff, and are thus dependent upon external expertise". Furthermore, the author highlights that this dependency especially concerns small firms, and explains this with that small businesses suffer from financial constraints, and it is therefore often difficult to justify the cost of custom software. Thong et al. (1996) confirms these statements by stating that "large businesses have their own internal information system department and are therefore not as dependent on external IT-consultant as smaller firms". McLachlin (1999) states that from the consultant's view, having the client in control is desirable. The author continues by informing that several of the consultants purposely try to avoid client dependency by forcing clients to take control.

#### 2.4. Summary of theoretical framework

In this literature review we have explored relevant theories and research within change management, knowledge management and the relationship between client and consultant. In regards to change management we started by defining the concept of change management. We have visited frameworks developed by Sirkin et al. (2005) to evaluate what is known as hard factors in a change project. Furthermore, Kotter's eight-step framework (2007) has been reviewed for best practice

about a successful organizational change. Furthermore, we discussed Heifetz and Linsky's (2002) framework, which shares similarities with Kotter's eight steps. Their article presents several techniques a leader can utilize when managing change efforts. Next, we presented Lewin's three-stage theory of change (Burnes, 2004), commonly referred to "unfreeze, change, and freeze". Furthermore, we presented and discussed Belkhodja et al's (2012) research on the assumed role of the consultant. His research showed that the consultants view the change process as a collaborative one, involving both the consultant and client organization. Lastly, we presented literature regarding the assumed role of the client in a change process, and the different characteristics that belong to different types of clients.

In the second part of the literature we started the section attempting to define knowledge management. We found that in order to evaluate the knowledge transfer in the client-consultant relationship, we need to develop an understanding of what characterizes an efficient knowledge sharing. Thereafter we explored different models within knowledge sharing. Firstly, we explored the importance of the competence and knowledge of the consultant and what types of knowledge the consultant can have. A model proposed by Bessant and Rush (1995), identifies several ways consultants can transfer knowledge to their client, and contribute to bridging the knowledge gap and improve the client's operations. Thereafter we looked at direct knowledge transfer in the change process, highlighting communication and training as central processes. The last thing we explored in this section was knowledge sharing within the client company. In this part we presented research that concentrates on factors that influence knowledge sharing for ERP-system usage. In this context, five factors have been identified by Goh (2002).

In the third section of the literature review we explored the assumed role of the client, and presented Ojasalo's (2001) three types of expectations a client can have when entering a consultancy project. These expectations can be fuzzy, implicit and unrealistic. Moreover, we presented different types of client-consultant relationships found in literature. Weer and Styhre (1997), presents two views on the client-consultant relationship: the functionalist and the critical view. Furthermore, Schein's (1978) three broadly accepted models are presented: the purchase expertise, the doctor-patient and the process-consultation. We included a small presentation of what recognizes a healthy and good client-consultant relationship, focusing on McGivern's (1983) article on the need for trust, and

Belkhodja et al's (2012) model illustrating the contributions of both client and consultant characteristics when building a relationship.

Lastly, we included some research on dependency between client and consultant. Research indicated that the client becomes dependent on external expertise mostly because of lack of inhouse resources. However, in regards to research conducted on dependency between a client and consultant in the aftermath of a project, minimal literature has been created. This leads us to believe that there is a gap in the literature, and makes this issue regarding dependency between client and consultant very interesting to explore.

# 3. METHODOLOGY

The purpose of including a methodology chapter is to clarify for the reader what we aim to do in this research, how we went about doing it, and why we have chosen to do it that way. In the previous chapter we reviewed theories within the fields of change management, knowledge management and the client-consultant relationship in order build a foundation before investigating our research question: Which aspects in the client-consultant relationship can shape how independent the client becomes from external consultants after the implementation of an IT-system? Since we were not able to identify any theories that could directly link this research question to predeveloped theories or frameworks, we will guide this research through three sub questions, which we have developed.

The theme for this thesis concerns the client-consultant relationship. To investigate this relationship we have performed two case studies from recently conducted IT-projects in Iceland. We wish to examine the two projects and link them to theories within change management, knowledge management and theories that concern the relationship between a client and consultant.

The first sub question can increase our understanding of the change process. By linking the projects to traditional change management theory we are more suited to measure how successful the projects have been, based on acknowledged best practice. Answering this question can hopefully also reveal potential sources, which influence how independent the client becomes from external consultants in the aftermath of a project. The following sub question has been formulated to serve for this purpose: How has the change-process been unfolded, compared to traditional change management theory?

It is established that knowledge sharing is crucial during a change process. The knowledge has to transfer from the consultant to the client, and the client has to be able to apply the assimilated knowledge into a newly implemented system. Inefficient knowledge sharing will influence to what degree the client will utilize the information system, which we believe will affect how independent the client becomes from external consultants. The second sub question will therefore be helpful in order to understand how the knowledge transfer has been during the projects: *How have the different parties involved in the projects affected the knowledge sharing?* 

The third sub question is developed to guide an investigation of the relationship between the client and consultant. An understanding of the relationship is likely to reveal additional information about the change process and the knowledge transfer. The third sub question that will help guide the research question is: *How can human aspects in the client-consultant relationship affect the success of the project?* 

In order to execute this research we have employed a pragmatic approach. The pragmatic approach is collected from philosophy of science, and implies that we have adopted research methods that suit our research rather than to force our research to follow a pre-determined approach stemming from a specific paradigm (Delanty, 2005). This has led us to performing a qualitative research analysis to answer the research question. Our findings are then derived from matching empirical data to the theoretical framework. Furthermore, applying this pragmatic approach will allow us to remain open for new findings that can emerge from the data itself.

Before introducing the research design, a methodological evaluation on the theory that was presented in the previous chapter is set forth. The research design aims to address the choice of method and the level of analysis, which concerns how we have collected the data, a data analysis and how we have reported our findings. To conclude the methodology section, a critical discussion of validity and reliability of the data is presented.

# 3.1. Methodological considerations on theory

The theories introduced in this project are included to guide and explore the research question when discussing the findings from our research. In the following section, an explanation of how the concepts derived from theory will be applied to our research is presented.

The theories behind change management are many, and several of them are widely used by management in organizational changes. For this research, and in order to address the first sub question How has the change-process been unfolded, compared to traditional change management theory? Change management will be a central theoretical concept that will be used to address how the company has undergone the transformation. Kotter's eight steps (2007) will be applied. These eight steps lay the foundation for our research and analysis. Kotter's change management framework is a well-cited theory, and very well respected among researchers. In the theoretical review we saw that this theory was able to capture large parts of the change process, including several relevant aspects for this research. In addition, this model is easy to understand and apply, the framework can be very successful when the eight steps are communicate and provides an overall structure for organizing a change process. Other theorists have included similar elements as Kotter (2007) in their research. For example, even though Lewin's (Burnes, 2004) work in change management theory is a well-cited theory as well, we agree with the critiques regarding that the last step "freeze" is too simplistic, and therefore less suitable for our research. By using Kotter's model we will be better suited to analyse the entire change-process within the client company, and in that way be able to identify the consultants role during this change. The model does not have predeveloped questions, but the article provides an opportunity to develop own questions based on the elements that Kotter identify in regards to the different steps and phases the framework presents.

In order to answer the second sub question *How have the different parties involved in the projects affect the knowledge sharing?*, which concerns the knowledge sharing between client and consultant, we draw upon several theories from the field of knowledge management. Firstly, the model suggested by Bessant and Rush (1995) will be applied. This model draws upon four roles that the consultants can undertake to better ensure knowledge sharing to clients. The model enables us to understand what knowledge the consultant possesses, and how the consultant has contributed in the knowledge sharing. Furthermore, in order to evaluate how the knowledge transfers within the client company after it has been transferred from the consultant, the model suggested by Chou et al., (2014) will be applied. This model is suited to reveal information about the employees and how the organization facilitates for knowledge sharing.

In order to investigate and try to develop an understanding of the relationship, and to answer the latter sub question *How can human aspects in the client-consultant relationship affect the success of the project?* We will deploy several theories that make it possible to investigate different elements of the relationship. First of all, we want to investigate the different expectations the client has towards the consultant, and will draw upon the framework introduced by Ojasalo (2001). In order to try to identify the relationship between the client and consultant we want to include the model proposed by Schein (1978): the purchase of expertise, the doctor-patient model and lastly the process-consultation model. These models can help investigate our hypothesis that *the basis for good knowledge transfer occurs already in the initial phase of the project, when client and customer establish a relationship*.

Theoretical Framework						
	Sub questions					
	Sub question 1	Sub question 2	Sub question 3			
Theoretical fields	Change management	Knowledge management	Relationship between client and consultant			
Authors	Kotter (2007)	Bessant, Rush (1995) Chou et al., (2014)	Ojasalo (2001) Schein (1978)			
Theoretical concepts	Change processes	Knowledge of the consultant Knowledge sharing within the client company	Expectations Trust			

The model is constructed to illustrate the operationalization of the theoretical framework, and will give an overview of how the theoretical concepts will be related to the sub questions.

# 3.2. Research design

Research design concerns the method, or approach that is applied to answer the research question. Within the qualitative method, we have used a case study design to investigate the sub questions and subsequently the research question.

## 3.2.1. Qualitative research method

Based on Bryman and Bell (2011) qualitative research share these characteristics:

- The research seeks to answer a question
- Produce findings that were not determined in advance
- Collects evidence
- Produces findings that are applicable beyond the immediate boundaries of the study
- Seeks to understand a given research problem from the perspectives within a local population

Research design can be divided into three parts: exploratory, descriptive and explanatory studies (Saunders et al., 2012). Exploratory studies are a valuable way to ask open-ended questions to examine specific happenings, descriptive studies aim to acquire an accurate profile of events, people or situations, while explanatory studies aim to establish causal relationships between variables. By using an exploratory study we were able to gather both primary and secondary data. In order to develop an understanding of theory for our research, a collection of secondary data collected from well-noted scientists and acknowledged articles have been of interest. The primary data that we have collected for this research is gathered from in-depth interviews in two case studies. These case studies are based upon inductive reasoning, which entails that the truth of the conclusion is based upon the evidence given (Bryman and Bell, 2011).

### 3.2.2. Multiple case study- a comparative design study

The case study approach is a popular and widely used research design in business research (Eisenhardt and Graebner, 2007). A case study design is often seen in association with qualitative research. The majority of case studies favour qualitative methods, such as focus groups or unstructured interviews, because these methods are likely to reveal significant information, and thus enable a detailed examination of the case. While Yin (1999) favours only qualitative data in a case study, Eisenhardt (1989) believes in a combination of both qualitative and quantitative data in order

to investigate the link between theories and conclusions. According to Eisenhardt (1989), the collection of quantitative data can create a path for further investigation though qualitative methods.

A sample size of two case studies does not allow for in depth statistical analysis. Furthermore, it will be difficult to successfully quantifying human aspects, such as the client's expectations and the consultant's ability to share knowledge. Using a qualitative case study approach for this research gives the advantage of capturing more complex aspects of the two cases, and therefore enables an evaluation of the relationship between the client and consultant. On the contrary, case studies might try to capture too many aspects of the relevant situation, and therefore fail to create a general overview (Eisenhardt, 1989). However, the aim for this study is not to create new theory based on our findings, but rather use scientific theories and advice from best practices, and link these to real life business projects. These studies are what Bryman and Bell (2011:60) defines as intrinsic cases, "cases that are undertaken primary to gain insight into the particularities of a situation, rather than to gain insight into other cases or generic issues".

We were given the opportunity to study two different cases in Iceland, which categorize our research in the group of multiple case studies or comparative design. In addition to explore the uniqueness of each case, this method leaves us with the ability to compare and contrast our findings between the two cases. However, with a multiple case study design, the emphasis is on the individual case, not the sample of cases (Bryman and Bell, 2011). According to Eisenhardt and Graebner (2007), a case study strategy is relevant if you want to gain a deeper understanding of the research context and the processes that are occurring. The context and process are of great value when investigating our research question. Knights and McCabe (1997) suggested the use of more than one qualitative method in order to not rely too much on one single approach. However, as Bell (1999) argues "a case study approach is particularly appropriate for individual researchers because it gives an opportunity for one aspect of a problem to be studied in depth within a limited time scale".

### 3.3. Level of analysis

In the level of analysis part, we will discuss the location, size and scale of the research. This is done in order do identify the primary unit of measurement and analysis (Bryman and Bell, 2011).

## **3.3.1. Sampling**

According to Stake (1995), the selection of cases should be based upon the opportunity for the researchers to learn. After several attempts of trying to get access to a consultant company with its respective client in Denmark and/or in Norway to participate in a case study, we were pleased that our supervisor was able to put us in contact with some acquaintances in Iceland. The choices of cases are therefore a result of his acquaintances. We were given the opportunity to study two very different and interesting cases. The first case concerns change in a team's working method at an IT-department in a bank, while the other case is a complex replacement of an IT-system in a hardware company. Common to both is that they have used external consultants.

During these case studies we have been given access to two very different cases, which have increased our knowledge about scrum and ERP-systems. Furthermore, we have been able to observe elements in the client-consultant relationship, giving us valuable insight to bear in mind when we are soon to be entering into the role as consultants after completing our master's at Copenhagen Business School. We believe that this research is valuable to us, as well as for others, because it increases the knowledge of the very different roles of being the client and the consultant working together in a project.

Our interviews were conducted in Iceland, a Nordic island country. The small country has a population of approximately 318,000, where approximately 50% of the population lives in the country's capital Reykjavik and its near surrounding areas (Iceland.is, 2015). The Icelandic economy today is still recovering from the financial crisis in 2008. Iceland's economy is slowly returning to macro levels prior to the crisis, this involves lower inflation, declining unemployment and improved fiscal accounts (OECD, 2014).

Some facets of the Icelandic culture are slightly different from the Nordic countries (Business Culture, 2015). They are known for being relatively open-minded and having a low threshold for making contact with strangers. This small and tightknit population has had an effect on the Icelandic business life (Eyjolfsdottir and Smith, 1997). Through observations during the interviews in Iceland, the generally low formality in the business world and other social settings was observed and re-confirmed our prior knowledge. We were soon to realise the close ties between people, and short links in the networks in Iceland. From our point of view, it seemed like somehow, almost

everybody is connected. The low degree of formality in the Icelandic business culture can be explained by that Iceland is relatively new to the global business environment (Utanríkisráðuneyti, 2015), and therefore lack experience. The Icelandic society is very tight knit with a high degree of trust.

### Landsbankinn- The client company

Landsbankinn is one of the top three Icelandic financial institutions. The bank has divided their operations into seven divisions. Income-generating divisions are three in number: Personal Banking, Corporate Banking and Markets. Support units are Risk Management, Finance, Corporate Development, HR, Operations and IT. Landsbankinn is the successor of Landsbanki, which collapsed during the crisis in 2008 (Landsbankinn, 2015). The National Treasury of Iceland is the largest shareholder of Landsbankinn, and holds 97,9% of the shares. Landsbankinn holding company (hf.) holds 1.3% of own shares and around 1400, current and former employees hold the remaining shares. One of the goals of Landsbankinn is to focus on operational efficiency by "streamlining and simplifying the current operation of IT systems, as well as by reducing cost of their operations and working on the implementation of new standardized systems" (Landsbankinn, 2015).

The team that underwent the change process (referred to as team 2) in the case study at Landsbankinn, at first consisted of eight team members. Since the time when the consultant was present at Landsbankinn there has been changes to the team. Currently, only two of the original employees are still part of the team. On a daily basis the team's tasks are to handle incoming IT-related inquires from other departments within Landsbankinn. Fundamentally, the team, which belongs to the finance department, acts like a business intelligence group, working heavily with the data warehouse team. Recently, both the team and the entire organization had been affected by a general cost cutting. This is a trend currently happening in all the major Icelandic banks and financial institutions (Landsbankinn, 2015).

It should be noted that the consultant was intentionally brought in to assist another team. Stories concerning the other team (referred to as team 1) are included to draw contrast to the team that we have investigated. We have not had the opportunity of meeting anyone from team 1, and will therefore not draw any conclusions from the stories told of team 1.

### *Miracle- The consultant company*

Miracle is a relatively young consultancy company localized in Iceland. The company was founded in 2003, and consists of a team of expert database consultants, business intelligence and a team of programmers. Altogether they are approximately fifty employees (Miracle, 2015). Miracle can provide service to a wide range of different clients from various business sectors, which today include banking, airline, public and health (Miracle, 2015). The company has a simple business idea: they strive to offer their clients the best services available and access to leading experts in the field of database-related technology (Miracle, 2015). Miracle is an independent vendor and therefore claim that they are capable to offer their clients unbiased consulting services regardless of the interests of software vendors. In regards to what partners Miracle works with, they have chosen to work with companies they believe excel in their field. These companies are Oracle Corporation, Microsoft Corporation, Lumi Gent and Embarcadero. In addition, Miracle has for the third successive year been awarded first place in its class of small and medium businesses for business of the year. The poll was conducted by VR, which is an Icelandic trade union for employees in the commercial and service sector (Vr.is, 2015). The decisive factor in this competition is based on how the employees themselves consider their own working environment.

# The Landsbankinn/Miracle case

Originally, Landsbankinn hired Miracle to help them with another problem than the one that is reviewed in this case study. The consultant from Miracle was hired to assist with the knowledge transfer from two central individuals that had quit their jobs in Landsbankinn. The consultant discovered that team 1 had another critical problem in their internal procedures. The process of how they organized and handled their incoming projects was far from optimal. The improvements the consultant generated in team 1 was noticed by other people in the organization, and the team leader in team 2 contacted management in order to receive permission to use the consultant in her team also. This permission was granted, and the consultant spent time at both teams while he was present in Landsbankinn. In the course of the next six months the consultant implemented the scrumprocess in the team. The implementation in team 2 is the case that is primarily used for this case study.

### Husasmidjan- The client company

The second company in the case study is the leading hardware and home improvement chain in Iceland, Husasmidjan. The company was founded in 1956, making it the oldest operating hardware store in Iceland (Husasmidjan, 2015). Husasmidjan has a total of sixteen hardware stores located all around Iceland, and two warehouse and distribution centres designed to serve all the stores. The philosophy is to "recognize the importance of a good beginning in the success of any venture" (Husasmidjan, 2015). The company prides themselves with being very market oriented, who works hard to be the best service company in the market of providing, selling and distributing goods and services (Husasmidjan, 2015). Husasmidjan does this by working to offer outstanding services and a wide range of products at competitive prices. Furthermore, the organization has a big focus on utilizing the knowledge and professional skills of their employees to the full extent. Today, there are approximately 450 employees at Husasmidjan.

## *Annata- The consultant company*

Annata is an Icelandic IT-consultancy company delivering technology solutions and professional services to business-customers and partners worldwide (Annata, 2015). Currently, there are fiftyfive employees at Annata, a mix of technical programmers and business consultants. The technical programmers are employees that develop ERP systems, building technical solutions based upon requirements from the client. The business consultants provide expert advice on how the system should be incorporated into the organizational structure, and teach their clients how to use the new system. Annata describes themselves as consisting of highly motivated professionals, who through creativity, collaboration and commitment, help customers excel in their business. What distinguishes Annata from other IT-consultancy companies in Iceland is that they offer a management solution system, which is built as an add-on to Microsoft Dynamics AX, which is a general ERP software solution. Annata calls this system Annata Dynamics IDMS, and it is especially designed to support the automotive, equipment, rental and fleet industries. Annata provides these solutions to companies in the Icelandic market and has an international presence with offices in Europe, North America and Asia. In addition, Annata has partnered up with companies worldwide; Annata uses this partner-network in order to distribute their software, the Annata Dynamics IDMS, worldwide.

### The Husasmidjan/Annata case

Husasmidjan's motivation for hiring Annata was the dire need for a new ERP-system at Husasmidjan. Their current ERP-system was becoming out-dated, and updates and maintenance for the old system were becoming less available. Husasmidjan was in 2012 sold to a Danish, family owned company named BYGMA Gruppen. BYGMA Gruppen had changed their current ERP-system and implemented the Microsoft AX 2012. Because of this, Husasmidjan was receiving pressure from this counterparty to update to this new system. Before it was decided that Annata would be the contractor for the implementation, a tender offer round was conducted. Several companies made offers on the project, but in the end Annata was the strongest contestant and won the bid. The process started in February 2013, and the contract-design was completed in September 2013. As of today (07.05.15) this is still an on-going project.

## 3.3.2. Preliminary phase: Informal background interviews

Upon our arrival in Iceland, we had booked a meeting with a person who has prior experience from being both the client and the consultant in IT-projects, from now on referred to as the middleman. This gave us the opportunity to gain a two-folded view about the client-consultant relationship, and thus some valuable insight for our interviews in the following interviews during our stay. The interview was conducted in an informal setting, using an interview guide. The interview object had worked as a middleman in the pre-phase of the Husasmidjan/Annata case, connecting the client to the consulting company. As a consequence, he was able to give information about the specific IT-system that had been implemented. In addition, the interview object was able to give us general information about the construction of contracts and how they differ depending on the type of IT-project, as well as the process of making the initial offer. The interview was conducted in Danish and Norwegian, and was recorded.

### 3.3.3. Primary Phase: Semi-structured Interviews

The second and primary phase of the research process consisted of qualitative, semi-structured interviews conducted with employees from both client companies and consultant companies. In each interview we followed a list of open-ended questions (Bryman and Bell, 2011), where we were able to ask new questions during the conversation as we saw fit. The questions were structured to seek answers to the three sub questions. In addition, some questions were developed to directly answer the research question. The interviews were conducted in what Bryman and Bell (2011) regard as a semi-structured manner, which indicates that qualitative interview questions departing

from the interview guide, asking follow-up questions, variation in the order of questions, and also variation in the wording of the questions is permitted.

### **Participants**

From the client companies we were able to meet with CFO, project leaders, team members, and an employee who is an end-user of the IT-system. These participants are in line with some of the definitions drawn by Schein (1978) and Themistocleous et al. (2011). Ideally for the validity of the research, we would have met with additional employees at the two client-companies in order to collect more data for our research. The same reflection is made regarding the consultant companies, where we only met with one IT-consultant from each company. The order of the interviewees was randomly selected, and was mostly a matter of the availability both in regards to the objectives, and our short period of time staying in Iceland.

Following is a description of how we have constructed the interview guide, a more detailed presentation of whom we have interviewed, how we have conducted the interviews and how we prepared the collected data for further analysis.

## 3.3.4. Construction of the interview guides

For the interview with the middleman who has experience from both angles, we used an interview guide that was developed especially for this interview (Appendix 1). The reason for this is that this interview object was not directly involved in any of the case studies we are executing, and the questions will therefore be constructed in a more general manner to reveal information about the projects. We wanted to gather as much information as possible on additional things in the IT-implementation process, such as the construction of the contract and information about ERP-systems, in addition to his viewpoints on the client-consultant relationship.

In advance of our interviews, we used the theoretical framework to create a semi-structured interview guide, in which the three formulated topics: change, knowledge and relationship, were incorporated. We developed two different interview guides for the primary interviews, one for the clients (Appendix 2), and one for the consultants (Appendix 3). In the very first phase of the interview we wanted to get to know the participants, and we therefore asked the interviewees for some background information about themselves (Bryman and Bell, 2011). We were determined from the very beginning that in order to ensure the best possible outcome of the interview we had to

create a safe environment between the interviewee and ourselves: In order to better ensure that the interviewee would open up and share their personal experience with us, we had to create trust. We therefore started each interview by telling the interviewee about ourselves and our personal backgrounds, as well as telling them about our purpose of this meeting and what we wanted to accomplish.

The first part of the interviews was characterized by light, straightforward questions that mostly concerned the process of the project, participants, the project timelines and budgets. These questions were adjusted based on with whom we were interviewing. By starting the interviews with asking these simple questions we were also in line with establishing a safe environment for further questions, that we knew were going to be dependent on how open and personal the interviewee would be; which we further argue is dependent on the relationship we have developed in the short time available.

The next part of the interview was formulated to explore the three sub questions, and was constructed by asking open-ended questions. This was done to encourage the interviewee to express and elaborate on his or her points of view, as this viewpoint is of true value for our research. By using a semi-structured interview guide, we (as the interviewers) were able to ensure that all topics eventually were incorporated and that our research-focus was maintained. It also enabled us to make the conversation more flexible dependent on the interviewees answers, by asking follow-up questions. This technique also enabled establishing a sense of informality, reinforcing the trusting environment that we aimed to establish. The semi-structured interviews allowed us to gain a deeper understanding of the interviewees' opinions on the topics, as well as that we were given the opportunity to explore new topics that could be further explored in the analysis and that also could influence our research.

In the end of each interview we had scheduled time for us to summarize some of our findings with the interviewee (Bryman and Bell, 2011). This was done so we could make sure that we had understood the interviewees, and that we had interpreted opinions and viewpoints accurately. This was especially important because we sometimes experienced language barriers. Furthermore, it opened up the possibility for further follow-up questions from us, but also to encourage the interviewee to add additional comments, personal thoughts and opinions.

Our interview guide is constructed in a way that the most of our questions are selected from the articles we have introduced in the theoretical review and their respective questionnaires, which we consider to be most relevant for our research.

# **3.3.5.** Conducting the interviews

We have conducted eight interviews: five of them were with representatives from the two different client companies, two IT-consultants representing each consultant company and one interview was with the middleman who had experience from both angles. Neither of us had prior relations to any of the companies. The interviews all took place in the company's offices expect for two, which took place at a coffeehouse in the city-centre because of its convenient location as we just had arrived from the airport. The interviews were all scheduled to last for an hour; some interviews went over the time, while others where shorter because the interviewee had another meeting.

Company	Position	Project	Interview location
Middleman	Professor at Reykjavik University and owner and consultant at Rikcon Solutions	Middle-man	Coffeehouse
Miracle	Consultant	1	Coffeehouse
Landsbankinn	Team-leader	1	Meeting room at Landsbankinn
Landsbankinn	Team member	1	Meeting room at Landsbankinn
Annata	IT-consultant and Project leader	2	Meeting room at Miracle
Husasmidjan	Project leader	2	Meeting room at Husasmidjan headquarters
Husasmidjan	CFO	2	Meeting room at Husasmidjan headquarters
Husasmidjan	End-user	2	Meeting room at Husasmidjan headquarters

To clarify, we have constructed a table in which we summarize the persons we have interviewed, including the company's name and their positions in the company. For anonymity reasons, we have decided not to mention the interviewees by real name, but rather used their engagement and position in the organization during the time of the project when referring to them. This is consistent throughout our research and is applied to transcriptions, analysis and reporting of findings.

All interviews were recorded to make certain that the subject's answers were captured in their own terms and for the purpose of transcription. The interviews where transcribed in order to reproduce exactly what the interviewee said. This means that if we were not able to catch all words from the recording during the transcription, we used the convention: (???), rather than guessing or making up what the interviewee might have said (Bryman and Bell, 2011:483). Furthermore, this entails that grammatical errors and the structure of sentences are therefore transcribed as stated.

We were both present during all interviews, which ensured us that we asked all questions necessary and that we fully explored the interview objective's opinions. One of us was in charge of following a certain structure and keeping track of the time, while we both asked the questions and follow-up questions interchangeably. We had prepared for using this method in order to reach a conversation and atmosphere that was informal and relaxed during the interview.

### 3.3.6. Preparing Data for Analysis

After each interview, we took the time to reflect upon the interview while the memories and impressions were fresh in mind. We discussed our opinions about the mood of the interviewees, their responses to the questions and tried to sum up the most important points that were brought up. If there had emerged new topics in relation to our research, we made notes and discussed the relevance of the topic. This helped our further understanding of the interview, as having a conversation about our own impressions sometimes led to fruitful discussions when our impressions differed. In our analysis, we have taken the interviewee's tone in saying, silences and how we remember the body languages into account. We therefore made notes about our perception about the interviewee straight ahead. When we arrived back in Denmark we immediately started the transcription of the interviews. The transcripts of the interviews can be found in appendix 4 to 11.

### 3.3.7. Primary Analysis of the qualitative data

The most widely used framework to analyse qualitative data is through grounded theory. "Coding" is a developed tool within grounded theory, where the data is broken down into component parts,

which are given names. We performed a generic form of analysis of the qualitative data (Creswell, 2003). Meaning that we analysed the transcribed interviews for themes in order to get a deeper and broader overview of the collected findings. Similar and repeated themes were given the same code. We started discussing the relevance of the data in respect to the chosen theories. Some themes were relevant in more than one theory, and are therefore likely to be mentioned in those theories that we see fit. Our interviews, analysis and codification of the data led to a classification of the following themes: the initial phase, resistance to change, knowledge of the consultant, knowledge sharing within the client company, expectations and trust, and current status of the project.

In addition, as a result of a semi-structured interview strategy, some themes emerged during the interviews and were not anticipated before the interviews. The emerged topics have been categorized as *communication style, training and client satisfaction*. We therefore had to revise and extend the theoretical framework and include theories and best practices that concerned these themes. The following model includes an updated version of the original theoretical framework that was presented early in the methodology section.

Updated Theoretical Framework						
	Sub questions					
	Sub question 1	Sub question 2	Sub question 3			
Theoretical fields	Change Management	Knowledge Management	Relationship between client and consultant			
Authors	Kotter (2007)	Bessant, Rush (1995), Roberts (2000) Reagans and McEvily (2003) Manuti et al. (2015) Bender and Fish (2000), Chou et al., (2014)	Ojasalo (2001) Schein (1978)			
Theoretical concepts	Change processes	Knowledge of the consultant Communication Training Knowledge sharing within the client company	Expectations and trust			

Some themes that emerged from the interviews are excluded from further analysis because of their relevance towards the research question. These topics have however, increased our overall understanding of the themes and have therefore been of great value to us. The topics that have been excluded regard technical details about the ERP-system and the scrum method, and how the different contracts could be structured depending on the project. Themes that, from our point of view, are not as relevant in regards to answering our research question.

### 3.4. Critical discussion of the data

To ensure greater quality in our study, we want to address some of the main challenges with qualitative data analysis (Bryman and Bell, 2011:408). In the following section, the validity and reliability of the particular data from the case studies will be assessed.

### 3.4.1. General critique to qualitative research

In a qualitative study you cannot be sure whether or not your answers are a true indication of the real world (Bryman and Bell, 2011). The generalization of data refers to how well the results of these studies can be transferred into other research areas (Saunders, Lewis and Thornhill, 2003) and in that way contributes to identifying best practice for implementation of IT-projects. In our small sample from Iceland, some of our results are likely to be situational. It is therefore difficult to prove that these results can be generalized for all client-consultant relationships. We do however see that some of our findings in this study are found in other case studies of the client-consultant relationship. This belief is reinforced when some of our findings are similar to well-known researchers answers to best practices in a successful IT-implementation.

Furthermore, qualitative research has been accused for lacking transparency. This transparency concerns the accuracy between the participant's views and the researcher's representation of them. Qualitative methodology also recognizes the subjectivity of the researcher. This subjectivity can influence everything from the choice of topic, formulation of research question and sub questions, selection of theories and methodology, to the interpretation of the findings.

#### 3.4.2. Critical discussion of this research

### Impact as researchers

We have throughout the whole project been aware of, and taken into consideration, our own possible biases as subjective researchers. We could be affected by the fact that we follow a theoretical framework, and thus have predetermined attitudes and ideas. Being aware of what the

theories indicated about special topics, as well as intentionally looking for challenges that had risen in the projects, can influence our way of asking the questions to the interviewee. Nevertheless, being aware of these biases and our personal limitations, we have developed our research while having a critical mind on our biases in terms of reliability and validity.

## Relationship bias

Linking back to what we have mentioned above in regards to doing the case studies in Iceland, and people living there often having prior relationship to each other because of the close population can affect our results. When this is the situation, it is likely to think that it will contrast from other countries with greater populations and many more consultancy companies to compete with, and this can influence our results. For example, if there is a prior relationship or a tie between the client and the consultant, it might be easier to establish trust between them. Furthermore, when there are few consultancy companies, there may be incentives for the consultants to work even harder to make sure that the clients are satisfied. In addition, being a close community word travels fast, which again may affect the reputation of the consultant company. This may increase the incentives for the consultants to invest more in the project if the ties are close and the consultant has personal reasons to ensure success. Some of our participants had connections with each other. However, none of them seemed to have close ties to each other, and none of the consultants had worked on prior projects at their respective client companies.

### Subject bias

When conducting our interviews, we always recorded the sessions in order to be able to transcribe them later for further analysis. As Bryman and Bell (2011) points out, it is possible that a tape recorder may disturb respondents, making them feel uncomfortable, giving answers they think are 'right' rather than their true opinions. However, none of our interviewees had any opposition to being tape-recorded and it did not seem to bother them during the interviews. Though it is impossible for us to be certain that all interviewees spoke openly and truthfully, we perceived interviewees' answers as very open through their willingness to discuss and elaborate on their opinions and experiences. Another possible barrier in our research process could be language. Except one, all of our interviews were conducted in English, which might have made it difficult for interviewees to fully express themselves as Icelandic is their mother tongue. We experienced small difficulties with language barriers. This may have resulted in us helping the interviewees to express

themselves by assisting them with wording. This in turn can have resulted in us leading the interviewee to a specific answer. In addition, when using quotes we have sometimes done minor modifications to the language, to make the statements easier to understand for the reader, being very careful of not distorting the message.

## 3.4.3. Validity and reliability

It can be problematic for qualitative research to generalize its findings across social settings (Bryman and Bell, 2011) and thus to develop external validity. The external validity is also impaired when we are using a case study or small samples (Bryman and Bell, 2011). However, our aim for this research is not to find a generalized solution to a good relationship, or the perfect recipe for a successful IT-implementation, but to draw insight into the field of strategic management and information management.

In order to reduce the probability of drawing conclusions from information gathered from subjective interview objects, which may give a very one-sided picture, we have decided to interview both the client and the IT-consultant. By doing this we hope to gain greater insight in regards to actual interactions, reflections and behaviour between the two parties. As a result of not being able to observe the project and the interaction between the parties ourselves, we are dependent on being able to trust the informants, their perceptions, interpretations, experiences and the accuracy of their retellings told in retrospect.

Another factor that may affect the accuracy of our results drawn from the empirical research is what type of projects we were assigned. There is a possibility that we were assigned to evaluate a project, where everything has gone exceptionally well or exceptionally bad. This will consequently also colour the results. Being two researchers who can share reflections in the aftermath of the interviews strengthens the internal validity of this study. This allowed us to conform our judgments of the interviewees and constantly discuss our methods and findings. We argue that by constantly being aware of these possible weaknesses and challenges during the entire process, it has strengthened the internal reliability of our findings in the best possible manner.

# 4. PRESENTATION OF FINDINGS

As a result of conducting semi-structured interviews, where there is room for themes to emerge during the interview, we received unstructured answers. In this chapter we will present the findings from the research, which was conducted in Iceland. The presentation of findings is structured around eight major themes, which will form the headlines of this chapter: *the initiation phase, resistance to change, knowledge of the consultant, communication style, training, knowledge sharing within the client company, expectations and trust, and current status of the project and client satisfaction.* These themes will pose the foundation for answering the three sub questions, and subsequently the research question. The theoretical framework, which was established in the methodology chapter is developed for analytical purposes, and will therefore not form the structure and organization of this paper. The theoretical framework that was developed will be used to analyse our findings and link them to theoretical best practices.

# 4.1. The initiation phase

#### Landsbankinn/Miracle case

The change project in team 2, was a result of that a consultant from Miracle was hired to assist team 1 in transferring knowledge from key-employees who were going to quit. While assisting in this knowledge transfer process, the consultant recognized great inefficiencies in how the first team was handling incoming inquiries. The consultant introduced the concept of the scrum method, a project management theory, to team 1 in Landsbankinn.

Within a short period of time, the consultant became acknowledged for his expertise and his work done in team 1, by team 2, top management and several other departments in Landsbankinn. Using the scrum method had given great progress in handling incoming inquires at the IT-department. These acknowledgements resulted in that his expertise became requested from another IT-department in the bank, team 2. The team leader at team 2 did through informal meetings with the consultant receive an introduction to scrum. She approached management to determine if her team would be granted permission and the resources to hire the consultant. After discussions between the team leader, top management and the project management office, team 2 was granted permission to hire the consultant. At this time the consultant was simultaneously assisting both teams, dividing his time between the two of them. After the permission was granted from management, the consultant introduced scrum to the entire team. In this meeting, the current status of how the incoming inquires

were handled today, was contrasted against how the scrum method could help improve this process. In this meeting, the team leader encouraged everyone to be a part of the discussion and voice their opinion. According to the team member, everyone in the team agreed that the way they handled the incoming inquires and projects in the past was unstructured and inefficient.

There was a clear dissatisfaction from the other departments in Landsbankinn who had expectations about their technological "problems" being fixed at a pace that at the current time was difficult for the team to meet. According to the team member the most frequent complaint was that the duration of each project was unacceptably long. The team felt pressure, which caused stress and thus created a negative spirit within the team. We asked both interviewees from Landsbankinn if they had thought of changing the way they were working at an earlier time. Both informed us that this was something they had reflected on in the aftermath of this project. Their conclusion was that it is difficult to change your routines and the way things have always been done, because you often believe that this is the most efficient way to do things. Furthermore, the consultant believes that the issue with team 2 was that they were not given the correct tools to work with.

In the very beginning, the number of participants in this project was small: the consultant from Miracle and the team leader. The team leader had been given a relatively free rein from her supervisor. The only requirement the team leader had from management was to give informal updates on the process.

### Husasmidjan/Annata case

For Husasmidjan the reason for the change was a result of that the current ERP system they had used for almost two decades were approaching extinction. Microsoft (the developer) was no longer developing software updates for their current version. Furthermore, Husasmidjan's current system was not satisfying the company's needs in regards to keeping up with technological requirements from both the warehouses and retail-stores. Basically, their system was out-dated, in all possible facets. This was in common agreement and understanding in all levels of the organization. All employees knew that at a certain point, the company would have to convert to a new and updated system. After Bygma (the parent company) in Denmark had successful converted to the Microsoft AX 2012 system, pressure from management in Bygma Denmark started, and the pressure that Husasmidjan should do the same became apparent.

In the initial phase, when Husasmidjan was trying to decide what consultancy company they should choose for the project, there were two competitive consultancy companies that were involved. This is where the middleman that we interviewed had a central role: matching Husasmidjan with Annata. Based on his knowledge about both parties, he was able to recognize value for both of them entering into a partnership. There was competition between the consultancy companies that all had previous experience with the Microsoft AX system. All the competing consultancy companies made a demo session of the Microsoft AX 2012 solution, including how their company would solve the different requirements needed by Husasmidjan. After that demo session, the consultancy companies made a tender offer, an informal bid, which included the price for the project. Even though Annata had the most expensive bid amongst its competitors, Husasmidjan choose Annata. When we asked the consultant why he thought Husasmidjan had chosen them, he answered that he thought that Husasmidjan liked the people from Annata better. He also said that prior history and an unfortunate experience with the other consultancy company might have affected their choice. He continues by stating he does not have sufficient information in order to elaborate more, other than bad success rate in a recent project with the other consultant company. Annata decided to reduce their price in order to come to an agreement with Husasmidjan.

During the ERP-implementation, there were many people involved from the very beginning of the project. Employees from Annata, as well as from Husasmidjan have played central roles. According to our interviews has there been approximately thirty people involved during the process, including departmental managers, sales people, finance people, top management, key-users and project leaders. There were appointed project leaders from both parties, which were given the overall responsibility for the coordination and implementation of the project. The project leader from Husasmidjan has a bachelor's degree in logistics, and experience from management and supply chain in the retail industry. In addition, the project leader has experience being involved in several other ERP-implementations, but not the ERP system offered from Microsoft. The project manager from Annata has previous experience being project leader for various IT-projects. He has an educational background in civil engineering (BSc.) and construction management (MSc.). This project leader was the one we interviewed from Annata. In addition, there were a couple of technical programmers from Annata involved in the initiation phase.

# 4.2. Resistance to change

### Landsbankinn/Miracle case

Both the client and the consultant seemed to agree upon that team 2 did not experience any resistance in regards to the change. When asked about resistance within the team, the team leader from team 2 replied:

"Not at my team, but at the other team. Definitely. Basically everyone was ready to change. Because before there had been a lot of frustration, we were not receiving good feedback from the business. We didn't know what we were supposed to do. So the frustration in my team was pre-existing and everybody was ready to change that" (Team leader, 06.05.15).

We were given the impression that the other team (team 1) had been different in regards to resistance. In order to draw a contrast in regards to how different degrees of resistance can have an impact on organizational change, we would like to include some examples from team 1. We asked the team member from team 2 about her personal opinion in regards to why team 1 had experienced more resistance. She told us that the team members in team 1 are older, and did not want to change the way they were working. Furthermore, she and the consultant agreed upon that it has a lot to do with the team leaders personal characteristics. At team 1 the team leader was from China. The consultant draws a picture to illustrate the atmosphere in the first team: a foreigner, a woman, very small, who is greatly educated, but does not speak the language, is put in a leading role in the bank. He illustrates a negative tension towards the Chinese team leader from the very beginning, and tells that:

"It only takes one rotten apple in order to influence to whole group. If the team leader had been a tall blonde Norwegian guy things could have been very different. I really think that the success of this project would have been different. You know the famous glass-roof? I think I saw every bit of it" (Consultant, 05.05.15).

In addition the team leader informed us that there had been several other internal candidates for the position the Chinese woman was given. Numerous of these potential candidates were upset with the decision regarding who was offered the position, and felt the decision was unfair and that the job was undeserved. Furthermore, people would not talk to her in a language that she understood.

"People would not talk to XX in a language that she understood. It was getting really frustrating for her, because she was really emotional and stressed because of this"

(Team leader, 06.05.15).

As a result of the different team leaders and different dynamics within the two teams, the consultant informed that it was necessary for him to play various roles in these two relationships. In addition to teaching the scrum method, he tells that he became more like a psychologist in team 1. Furthermore, he took part in the management meetings to ensure that the communication between the management and the team went well. Both the consultant and the interviewees from Landsbankinn agreed that the failure of the scrum implementation at team 1 was a result of these cultural obstacles. The story of team 1 ended with that the Chinese team leader quit her job at Landsbankinn, and moved back to China.

In the Landsbankinn/Miracle case we also uncovered resistance to change elsewhere in the organization. This resistance was something we had not anticipated before conducting the interviews, and is a topic that emerged as a result of the semi-structured interviews. In Landsbankinn the organization already had a project management office. This made it more complicated for team 2 to receive permission to hire an external consultant to help the team with a project management issue. The consultant also felt he met resistance from the project management office because they did not fully believe in scrum methodology. The resistance from the project management office resulted in that top management was sceptical towards the project as well, and therefore did not understand the need for acquiring consultancy services from an external party:

"(...), because there is this project management office, and then you have a consultant that is teaching how to work projects, and you are not using the project management office. And now you are saying that lets have the consultant teach the project management how to do it" (Consultant, 05.05.15).

Furthermore, the team experienced difficulties appointing product owners from elsewhere in the organization to participate in the scrum method. Reinforcing the resistance from elsewhere in the

organization. After the success of implementing scrum in team 2, the team leader tried to recommend the consultant to other departments in the bank:

"I tried to set up a meeting between them, but for the bank it went political. When I wanted to push him higher up, then immediately I felt a resistance from the management that there were not ready for a consultant" (Team leader, 06.05.15).

According to the team member, the bank is currently attempting to cut costs, and has introduced a temporary freeze of hiring external consultants.

In order to keep the positive spirit in the team, there had according to the team leader been a celebration after the first successful sprint. The curious thing is that the team members when questioned about this celebration had no recognition of it.

### Husasmidjan/Annata case

We investigated the resistance towards change within Husasmidjan, and the CFO answers:

"There is always some resistance, but I think that everyone knew that the old system had to be changed" (CFO, 06.05.15).

One type of resistance that Husasmidjan experienced was the resistance towards the new system and its deficiencies. The employees started comparing the new system to the old system. As it is today, both the new and the old system are used interchangeably. The CFO informs that starting next year, only the new system will be operational. The CFO continues by illustrates the resistance:

"(...) after the first month there were some managers that wanted to turn back to the old system" (CFO, 06.05.15).

When we asked how the CFO had handled this resistance he could inform that he had to inform everyone that there was no option "we are sticking to this change!" Furthermore, he informs that he tried to keep a positive tone by using a change management graph. A graph that illustrates an emotionally curve that employees normally experience during a change process (Appendix 12 for

illustration). Furthermore, the CFO of Husasmidjan emphasized that he was aware that his actions and his attitude towards the project is important because he is one of the figureheads of both the organization and the change project.

# 4.3. Knowledge of the consultants

### Landsbankinn/Miracle case

From the interviews and examination of the consultant's LinkedIn-profile it is clear that the consultant from Miracle has prior experience in regards to project management, and implementation of the scrum method. In addition, the consultant has work experience from the banking industry drawn from his previous job at Islandsbanki, a competitor of Landsbankinn. Furthermore, he has work experience from abroad, and was therefore able to draw contrasts to how Icelandic business culture can differ from other countries. We asked the consultant about what kind of role he had during the project. He could inform us that in the beginning of the project he was the scrum-master, a role he shared with the team leader at Landsbankinn. Gradually, he started to withdraw himself from the project, giving more and more responsibility to the team. The consultant was present in the offices of Landsbankinn during the whole scrum implementation. He was given his own desk close to the team members working space, and got access to the company's intranet system through a personal "Landsbankinn-email" account.

### Husasmidjan/Annata case

The consultant we met at Annata was also the project leader for this project and had been working for Annata for almost two years. He could inform us that he had previous experience working as a project manager for several years in various IT-projects. His educational background was in Civil engineering (Bsc) and Construction management (Msc), in Iceland and England respectively. From the interviews it is clear that Annata have had many similar cases to this project, but that it was the first time implementing the latest version of Microsoft AX 2012. The consultant continues by informing that his colleagues at Annata, who have been working at the company for a longer time than himself, have told him that this project is the most difficult and demanding project that Annata has ever conducted. When asked about what the consultant saw as his role as a project leader for Annata he told us that his main responsibility is to make sure that everyone knows what they are doing. He also adds that:

"I am in charge of all the plans, and that all the deadlines are met. Furthermore, I have to make sure that the customer knows the status of the process and the project" (Project leader, Annata, 07.05.15).

Annata provided almost all of their available resources, both technical programmers and business consultants to Husasmidjan. The CFO of Husasmidjan remarks that he is very satisfied with the programmers compared to the business consultants from Annata. He continued by saying that his experience from this project is that it is easier to relate to the programmers, and that the business consultants were of less use to him. Annata does not provide any support-service, and consultants from a competitive IT-consultancy company in Iceland were brought in to assist Annata during the go-live in the warehouses, because of a bottleneck in human resources from Annata at that current time. Furthermore, another consultancy company will assist Husasmidjan in technical support in the aftermath of the project. To this present day, the company do not have any prior experience or knowledge with the Microsoft AX 2012 system. When we asked the consultant about whether he thought the competitive consultancy company was qualified for taking the role as a support-service for Husasmidjan, he informs:

"No, that is the problem. They are not. They (referring to the future support-service company) have known this for a long time, and Husa has known this for a long time, and that they had to fix this problem. And they have asked us to have a direct support service for them, but we don't want to do that. We are not in that business. This will have to be solved. Definitely. We will just have to teach them about the AX 2012, or Husasmidjan. It is a little bit of a difficult situation if I can tell you the truth. Because who is to pay for this? Because XX knows very little about the AX 2012, and they want to service Husasmidjan and we basically are not obliged to train them really, but we would of course like to help them" (Project leader, Annata, 07.05.15).

# 4.4. Communication style

### Landsbankinn/Miracle case

We wanted to investigate how the consultant and client had communicated with each other. The team leader informed us that she and the consultant had daily meetings during the entire project. In

these daily meetings they would discuss the progress of the project, and the progress and personal development of the different team members. Together they attempted to figure out ways to improve the cooperation between the team members, as well as finding the right fit between the members and the different tasks. In addition to these daily meetings, the interviewees felt that as a result of the consultant being connected to the Landsbankinn intranet, the communication became frequent through e-mails. When asked about how the team member would characterize the communication style, she answered:

"Very informal, he (referring to the consultant) is very outgoing and fun to work with. He is not like other contractors where you feel that you have to stay back. He is not like that at all. And you could notice that he had a lot of experience, and then you respect him, and that makes him easier to work with" (Team member, 06.05.15).

## Husasmidjan/Annata case

The communication in this case has mainly been between the consultants, project leaders, CFO, the key-users and one IT-employee at Husasmidjan. We are informed that the main communication channel has been e-mail, and several informational meetings at Husasmidjan's offices. Furthermore, both the programmers and consultants have been physically present and available at Husasmidjan for the entire period. Husasmidjan has warehouses in three different regions in Iceland, and the managers in each warehouse have been brought into the headquarters in Reykjavik for meetings and receiving information in regards to the new system. After the meetings, these managers are solely responsible for communicating this information further on to the employees in the warehouses and the retail stores. The end-user informs that she had no problem approaching the consultant working in her department for technical guidance. The interviewees from Husasmidjan characterized the communication style with Annata as informal.

We asked the interviewee from Annata how he would inform the client about milestones in the project. He told us that he used excel to develop a project plan. Furthermore, the first half period of the project he arranged meetings once in a week in Husasmidjan's offices. In the last period they adopted the scrum method, and therefore met every morning for 15 minutes. The project manager and IT-employee at Husasmidjan were engaged in these meetings, and occasionally the CFO would also attend these meetings. A team from Annata was also present in these meetings. In addition to

this, e-mail, telephone and notes are used as communication channels. In addition, a webpage called SharePoint<sup>1</sup> has been used for communication in the project. Both parties seemed very pleased with this way of communicating. Annata has no prior experience with using this method in other projects. When asked about who has access to this webpage, we are informed that the project leaders from Husasmidjan and Annata are able to control who can have access to SharePoint. The consultant also informs that they attempted to restrict the number of people who has access to this webpage, mainly because some of the information on SharePoint being confidential and often irrelevant for other project participants.

You really want to keep some things aside (...) from people who are working on the project and people working from the client, because one of the huge tasks in every project is to make everybody happy and making sure that the morale in the project is good. So when the project leader and I are debating something about money you can never let everybody else know about that. We always have to come out from the room smiling. And that is also true about the management at Husasmidjan, (...) it is very important that the management (...) is always optimistic against everybody, even if everything is going to hell in the project, they always have to make sure that they have good face when talking about the project, because if the end-users and the key-users are loosing faith in the project because it is difficult then there is almost no way back. I mean it is very difficult to get back on track" (Project leader, Annata, 07.05.15).

When asked about if this was advice that Annata had given Husasmidjan, the consultant informs that he had reminded and stressed the importance of this to the project leader at Husasmidjan. The communication within Husasmidjan is illustrated by the CFO as something that he viewed as very important, and a task he contributed with. He is committed to sending a weekly e-mail to all the employees in Husasmidjan with information about the project and its development. The end-user thinks that this has been a great way of receiving information about the project. Even though the

<sup>&</sup>lt;sup>1</sup> **SharePoint** is a web application platform developed by Microsoft. SharePoint combines various functions that are traditionally separate applications: Intranet, extranet, content management, document management, a personal cloud and enterprise social networking. SharePoint makes it easier for people to share things, and is a professional way to communicate across different departments and organizations.

information in the e-mails seldom applies to her, it gives her a feeling that there is some progress even though she personally does not experience or observe it.

"People always want more information rather than less, but it can be very difficult. It is difficult to send these emails, because there are not always changes from each week and then it is black on white that there have been no changes at all" (End-user, 06.05.15).

# 4.5. Training

### Landsbankinn/Miracle case

The consultant gave an introduction to scrum to all the team members in team 2 in the initiation phase. In the following days and months, the consultant started implementing this method, giving increasingly more responsibility to the scrum-master. Miracle offers a 24/7 online support-service. In the case with Landsbankinn this support-service was unnecessary because the scrum method does not require technical guidance in that manner. Instead, the consultant was physically available at all working-hours, and therefore offered personal support. In addition to being physically available, the consultant invited both teams to a full day seminar. The day consisted of lectures from the consultant, as well as a Kanban simulation<sup>2</sup> where both teams were competing against each other.

"Already here you could see great differences between the two teams" (Consultant, 05.05.15).

To be able to redistribute the knowledge and teach others (referring to new team members), the team member expressed that she would have appreciated written manuals or handbooks related to how to use scrum. According to the consultant from Miracle, he sent the team member's articles and references to webpages in order for the team members to improve their knowledge about scrum. When talking about the training-process and knowledge sharing, the consultant from Miracle highlights that:

<sup>&</sup>lt;sup>2</sup> Kanban is, similar to SCRUM and Lean methods, a method for managing knowledge with a focus on just-in-time delivery principle, but at the same time not overloading the team members. In this approach, the process, from definition of a task to its delivery to the customer, is displayed for participants to see. Team members pull work from a queue.

"People only remember 5% of the things they are being told" (Consultant, 05.05.15).

## Husasmidjan/Annata case

In the case of Husasmidjan and Annata we are given the impression that there have been challenges in regards to the training of the employees. First of all, we are informed that the training process was delayed because of several setbacks during the process, and that the training was conducted very close to the go-live date. Furthermore, the interviewees highlight that only the key-users received training-sessions from the consultants. The interviewees inform that the project has had too few key-users. All interviewees gave the impression that they would have valued more training from the consultants. Another factor that was introduced by the interviewees at Husasmidjan are the useless training manuals or handbooks for the Microsoft AX 2012 system provided by Annata:

"Manuals were non-existent and we had to make them up our self. I think this was very bad. Instead we ended up with some form of education, that was not good enough but we did it just to calm the people. So that people would feel that there was some training. We couldn't just go live without people feeling that they knew anything at all" (CFO, 06.05.15).

A concept that has been developed in conjunction with this project is called "train the trainer", a couple of sessions where Annata educated the key-users at Husasmidjan in the new system. The key-users were then responsible for training the other employees. When asked about how the key-users had taught the other employees, the interviewee informs that the process had been very inefficient.

"We do not have many computers here, so people looked at other people's screens instead of trying the system themselves, which is not a very effective way of learning" (CFO, 06.05.15).

We were interested in investigating more into this dissatisfaction that Husasmidjan expressed about the training, and we therefore started asking more personal questions about how the interviewees felt about this lack of training. The CFO of Husasmidjan highlights that he experienced that the consultants from Annata always were in haste solving technical problems, and did not have time to

train the employees. We were soon to discover two slightly different opinions from this experience. The project leader at Husasmidjan, who has prior experience with a few employees at Annata, told us that they believed that Annata and Husasmidjan were both to blame for the bad training. On the contrary, the CFO clearly expressed that the lack of training and manuals was the sole responsibility of Annata.

On the other hand, the end-user told us that she felt that she had received a lot of training from the consultants in using the new accounting system, and that it was positive that the consultants were physically available all the time. She also noted that she had heard that her colleagues were unsatisfied with the training they had received. She also confirms that they had received manuals from Annata, but that these were so large and bewildering that they were of no value. The interviewees believe that it is likely that they will be reliant on technical support after the consultant leaves.

"We will always need some phone number or e-mail to contact someone who can assist us"

(Project leader Husasmidjan, 06.05.15).

When asked how they resolve technical problems today, the interviewees told that if they had technical difficulties with the new system they would write an e-mail explaining the problem and forward this e-mail to a joint e-mail address that was developed for this purpose. The project leader was then responsible to forward this to the right person who can help solve this.

# 4.6. Knowledge sharing within the client company

### Landsbankinn/Miracle case

At the relevant time of the project, team 2 in Landsbankinn existed of eight team members, and the entire team knew each other well and had worked together for a long period of time. The team member portrays a picture of good and professional relationships within the group. However, after the large turnover within the team after the consultant left, she informs of difficulties in regards to sharing knowledge about the scrum method with the new employees. The team member expressed that she had experienced some difficulties with teaching the new team members, and since the team today consisted of nearly all new members, it had been a time consuming process to teach the new employees in the scrum method. The team member argues that this teaching process could have

been more optimal if they had been better equipped with some written routines to pass along to the new team members. She also informs that the team is now trying to develop their own written manuals for their routines in regards to scrum.

## Husasmidjan/Annata case

The end-user informs us about how the key-users at Husasmidjan have created different learning materials. For example, there has been created a joint file on the intranet with straightforward information about the system. Furthermore, the key-users were in the process of making more user-friendly, modified versions of the original manual to the one they had received from Annata. In addition, the key-users have made short-videos, which illustrate different screenshots of the new system, and attempts to show the users how to navigate the system. Personally, the end-user has not used the videos, but has heard that her colleagues are very satisfied with these videos because they are very user-friendly. The project leader thinks the completion of the implementation of the project would have been easier if Husasmidjan had their own IT-department.

"Since we do not have any in-house expertise, we will always be dependent on some service" (Project leader, Husasmidjan 06.04.15).

The end-user told us that she had attended a training session the key-users held on the new ERP system, but since there are so many employees, and the system is customized for the different departments, she experienced that the training was too general. Furthermore, the facilitation in Husasmidjan's offices has been deficient because of too few computers, which have affected the training sessions because the employees had to share computers.

# 4.7. Expectations and trust

### Landsbankinn/Miracle case

In Landsbankinn, the client was aware of the inefficiencies in their processes, and when the consultant had proven success with the scrum approach in the other team the client wanted to achieve the same results for her team. The team members expected improvements in their working methods and visible results.

"My team was more optimistic towards using this system, and the other team (referring to team 1) was against it" (Team member, 06.05.15).

According to the consultant from Miracle is it very important to create trust at an early stage of the project.

"When I first arrived they saw me just as a man in a fancy suit. You have to establish trust, you have to show that you respect people, respect their job, and not just tell them that you have a better solution" (Consultant, 05.05.15).

We asked the consultant if he or Miracle had any prior relationship with Landsbankinn, and he told us that this was his first time working with them, but that other consultants from Miracle had been working with Landsbankinn for many years.

"There is a very good relationship between Landsbankinn and Miracle. It has been for many years. People know each other from other relationships" (Consultant, 05.05.15).

The consultant believes that he gained trust because of his professional background and prior work-related experience, which easily could be related to this project. Also, in the initial phase the consultant spent a lot of time talking to the team members and observing how the employees completed their workday. The consultant from Miracle was committed to teaching the team members everything he could before he left Landsbankinn. He thinks that this is something that contributes to earning the client's respect. When questioning the members of team 2 at Landsbankinn if they trusted the consultant, they both agreed that they trusted him. Mostly because of his knowledge, and that he gave an impression of being serious. Furthermore, the team leader explained that the consultant acted like one of the team members.

"He was open, he has this sense of humour, and he is this relaxed guy" (Team leader, 06.05.15).

### Husasmidjan/Annata case

As a result of that the maintenance on that the existing ERP system from Microsoft was about to expire, Husasmidjan was somewhat forced to change their system. The consultant from Annata told us that the project experienced some difficulties in defining what requirements they needed for the system. In the diagnostic phase, the phase where the client and the consultant try to map how they want the system to work in the company, the consultant used time, physically observing how the old system was working today. He also adds that it is in this phase the client and consultant get to know each other. It is in this process that roles are identified and the deadlines are made. This process is also important in order to customize the original solution from Microsoft. Another interesting notion made by the consultant, is that some of the requirements were missed in the first phase because the client did not think it was necessary to mention it for the consultant because for the client it was a very obvious requirement. Resulting in that this phase of identifying the requirements for the Microsoft AX system took longer time than what was first estimated.

At Husasmidjan they informed us that they were under the impression that the consultants from Annata did not appear to be very experienced with the newest version of Microsoft AX 2012 system. Several times they had experienced that the consultants had to search in the large manuals themselves, or contact Microsoft in order to understand facets of the system. At one point in time a programmer from Microsoft came to Iceland to assist Annata with facets of the implementation they were experiencing difficulties with. The end-user told us that other friends of her, who work in other organizations recently implemented an older version of Microsoft AX, and that they had not experience any significant troubles with the system. We asked the consultant why they had used the 2012 version, and not an earlier version. The consultant replied:

"Microsoft does not allow us to sell older versions than the newest one. Microsoft is forcing new versions into the market" (Project leader, Annata, 07.05.15).

He continues by stating that the 2012 version is not the best one, and that the new system has a lot of flaws and new features, which have given Annata a lot of trouble during this project. The consultant highlights this with an example. After Annata had spent approximately six months trying to implement the ORS<sup>3</sup>, which is an online retail store-solution from Microsoft, Annata decided to

<sup>&</sup>lt;sup>3</sup> OpenWay Reporting System

give up and bear all the costs themselves. The consultant informs that no company in the world has successfully implemented the ORS, and says that Microsoft is the one to blame for this. Microsoft will not refund the costs, but Annata is determined to get their money back.

The project manager at Husasmidjan informs us that prior to this project he had worked with some of the employees from Annata, and he therefore knew a few of the employees on a personal level.

"So the relationship with the client is one of the most difficult things in projects and the most important, because if you have a bad relationship between the project management of Annata, or the employees of Annata and the customer is starts to get infected within Husasmidjan too. Because if we are not talking together, they definitely wont be positive within their own organization" (Project leader, Annata, 07.05.15).

# 4.8. Current status of the projects and client satisfaction

### Landsbankinn/Miracle case

At team 2 in Landsbankinn it only took a few months after the consultant had left the group before modifications to the process were made. The consultant from Miracle left the team in February 2014, and the team appeared to have continued with the scrum method in a very satisfying manner in the following months. It was when the summer vacation was approaching that the team created changes to the traditional scrum method. The team agreed that for this limited period of time, the sprints should become longer because of the reduced capacity during the summer period. The second alteration the team made to the traditional method was also a result of the reduction in staff through the summer months. The team had experienced difficulties getting product owners involved in projects, and eventually decided not to assign each project a project owner. The team in Landsbankinn is still using a modified version of scrum.

We wanted to investigate what the consultant and the team leader thought was the key to success in this type of change process, implementing scrum. They both agreed that discipline was the main ingredient because it is very important to truly understand and follow the processes that scrum requires. In addition, the consultant adds that courage is an importance feature in scrum, because the challenge with scrum is that it often takes longer time to see results.

"You need to trust the process" (Consultant, 05.05.15).

When it comes to discipline and courage, the consultant observed a great difference between the two teams. According to the consultant, the success of team 2 was a result of that the team leader had courage and was great with communication and people skills. On the contrary, team leader from team 1 is from another culture, does not speak the language, does not have the respect from the team, and struggles both downwards and upwards in the organization.

The team member expressed that she would like the consultant to come back for a shorter period of time. From the interview with the team leader at team 2 at Landsbankinn we got the impression that she felt that the consultant were experienced in handling the implementation, and that he was able to transfer this knowledge and share his experience with them, in an explicitly way. Although the member felt that the consultant had withheld knowledge in regards to facilitating for training of new employees.

## Husasmidjan/Annata case

The ERP-system has been gradually introduced and implemented in Husasmidjan, the very first golive was in the spring 2014, and the last out of three go-lives was 1<sup>st</sup> of March 2015. At that time several requirements in the system were still not finished. However, Husasmidjan decided to go-live at this date. The consultant implied that if it had been up to him he would not have chosen to go-live at this time. When the CFO was talking about the go-live, and if they should have delayed the go-live, he tells:

"They (the consultants) were very happy, so we went for it. But it seems like they did not spot the difficulties and bugs in the system" (CFO, 06.05.15).

For Husasmidjan it was very important that the original deadline for go-live was met: Husasmidjan's products are seasonal, and they are therefore dependent on strong sales during the spring. The project leader from Husasmidjan informs that when the system went live in March this year, only a few employees had received training in the new system.

The majority of the problems after the last go-live were associated with the warehouses and retailstores, the system for the cash register in the retail-stores in particular. According to the CFO, this can be explained by the Microsoft ERP-solution being a standard system, and that this standard solution did not integrate well with the retail-stores. We asked if the CFO had any thoughts in regards to what the consultants could have done differently. The CFO informs that he would have wanted more programmers, and he also thinks that the consultant that was in charge of the retail-stores were not qualified.

"We will use the system as it is for now, and reopen new training session after the summer" (CFO, 06.05.15).

Annata is still present (May 2015) at Husasmidjan and working on the implementation. All respondents agree upon that Annata has done a great job, and that they would prefer to use them again. The end-user is positive towards the consultant, and believes that once the project is finished everything will be very good. The CFO emphasizes that he was especially satisfied with some of the programmers. All in all, the interviewees from Husasmidjan regard the project as a success, even though there have been difficulties. The project leader does however question if the consultant has transferred all their knowledge. He thinks that they had more focus on solving the different problems, and then moving forward instead of showing the users how to use the system.

The consultant from Annata informs about an interesting discovery: How this project has influenced the employees at Annata. According to the consultant it has been a very frustrating period for all of them. The moral and spirit have been affected. The programmers and consultants are almost working 24/7 in order to finish this project.

"Our manger he said that this was definitely the most difficult or challenging time in the history of Annata, which is fifteen years" (Project leader, Annata, 07.05.15).

# 5. DISCUSSION OF FINDINGS

In this chapter we will discuss and analyse the findings from the research, which was conducted in Iceland. The discussion of findings is guided by our research question *Which aspects in the client-consultant relationship can shape how independent the client becomes from external consultants after the execution of an IT-project?* The research question is structured around the three sub questions (1) How has the change-process been unfolded, compared to traditional change

management theory? (2) How have the different parties involved in the projects affected the knowledge sharing? (3) How can human aspects in the client-consultant relationship affect the success of the project?

In order to interpret the findings we want to relate the data to the theoretical frameworks that were developed in the methodology, creating a discussion between the findings and theoretical suggestions for best practice. We will discuss our findings in the same manner as we structured the findings in the previous chapter: the initiation phase, resistance to change, knowledge of the consultant, communication style, training, knowledge sharing within the client company, expectations and trust, and current status of the project and client satisfaction. Furthermore, as in the previous chapter, we will continue using the same structure when presenting the two cases: First a presentation of the Landsbankinn/Miracle case, then the Husasmidjan/Annata case. This is done in order to better clarify differences between our discoveries and analysis in the two cases. After discussing each case in the different sub sections, a few take-outs will be presented. In the next chapter we will seek to answer the three sub questions, using both cases interchangeably in order to draw conclusions to the research question.

## 5.1. The initiation phase

Discussing the initial phase we draw upon Kotter's (2007) four first steps of best practice for a successful implementation. The fifth and sixth step in the framework will be applied in the next sub section, concerning resistance to change. The last two steps framework, concerning the institutionalizing of the system into organizational procedures after the implementation, will be introduced towards the end of this chapter when discussing the current status of the projects.

#### Landsbankinn/Miracle case

Prior to the change within the team at Landsbankinn, the incoming inquiries were handled in an unstructured manner. All members acknowledged these inefficiencies. Everyone recognised the need for a change in their current project management approach, and it was therefore created a common sense of urgency to change the department's working method. The previous working method had resulted in dissatisfaction from the other departments within Landsbankinn, who were expecting quick results from the IT-department. Consequently, this negatively affected the working environment within the team, because they all wanted to be praised for their work, not only receive complaints. According to the team the most frequent complaint was that the duration of the project

was unacceptably long. This resulted in frustration within the team because, in their eyes, they were doing the best they could. If anything the problem was that they were not given the correct tools to work with.

The team observed the success of the implementation of the scrum method at a similar team in Landsbankinn (team 1), acknowledging that this method could work for them as well. The frustration and the positive impression regarding the scrum method, was therefore a motivator that contributed towards a mutual sense of urgency to change their current working method. The belief in the new system is reinforced by the fact that the team chose to go beyond Landsbankinn's own project management office. The team would rather hire an external consultant in order to gain access to the scum method, instead of using internal resources to optimize their processes. This indicates how much the team believed in the scrum method and how strongly the team felt an urgency to revitalize their working methods.

In accordance to the framework proposed by Kotter (2007), motivation is a key ingredient in a successful organizational change. Without motivation, people will not contribute in the changing process, resulting in the attempt to change likely will fail. Research by Kotter (2007) shows that one half of companies fail in the first phase of a change, emphasizing the importance of focusing on the initial first phase. From our point of view, it seems like the team leader and the consultant managed to create and convey a sense of urgency for the rest of the team.

The group of people responsible for driving the change process and creating enthusiasm, also known as the guiding coalition, was in this case very small. According to theory, it is important that this group of people is called a coalition and not a team, because the team is not naturally compounded, but shall consist of a diversity of employees working together during the change. Theory also implies that large coalitions are most powerful in regards to change efforts, but as this case illustrates, a small and nevertheless strong coalition where all members could voice their opinion was a positive contributing factor towards the completion of the project.

It was the team leader who envisioned that her team could improve their process in handling incoming IT-projects. The team leader had a clear target of what she wanted to accomplish.

Naturally, she wanted a working method that would facilitate better results for her team. From our

point of view, her vision appeared clear and easy to understand, two important factors, which are included in Kotter's (2007) best practice. In 2012, Landsbankinn reviewed their overall business strategy, and redefined their strategies towards achieving their new set of goals. One of the goals in particular was that the bank was to focus on operational efficiency by "streamlining and simplifying the current operation of IT-systems, as well as reducing cost of their operation, and working on the implementation of new standardized systems" (Landsbankinn, 2015). This overall vision for the company lays the foundation for the change in the team, and strengthens the team's vision for changing their working methods.

Together with her team, the team leader managed to undertake an authority-role as the scrummaster, at the same time as she preserved an environment where the team members felt comfortable voicing their opinions. In regards to change management theory this was a smart approach, because it facilitated an environment where the team members felt involved in the process. According to theory it will help the change process by making it easier: If possible resistors are a part of the guiding coalition and the vision-creation team, they will become remarkably more positive towards the change process. In this case, all team members gradually became a part of the coalition, which is very positive in regards to change management theory.

*In sum*, according to change management theory, the first phase of the change process has been a success. The team's vision has been easy to understand, and in line with Landsbankinn's overall vision. Therefore it has been easier for the team members to join forces and motivate each other throughout the change process. The small, but strong guiding coalition has functioned well throughout the project. Within the team there was a strong sense of urgency for changing their current operations, which facilitated a solid and strong foundation for change.

#### Husasmidjan/Annata case

In the initiation phase of the Husasmidjan/Annata case, the sense of urgency was high: A result of that the current ERP system was becoming out-dated. The high sense of urgency entailed that the change effort automatically awarded a lot of motivation from the employees because there in reality was no other option than to conduct this ERP implementation. In the ERP implementation at Husasmidjan there was a much larger coalition group than the one observed at Landsbankinn. This is natural, as this project is of a much larger size and complexity. The project not only affected all

the individuals in the organization, but also demanded that everyone had to contribute in the change process. The larger scale of this project therefore demanded a strong coalition in order to successfully involve and create engagement from all levels of the organization.

The most important aspect of a guiding coalition is its diversity. An effective team is comprised of individuals from across the organization who obtain unique skills, experiences, perspectives and networks: their distinct views allow the team to see all sides of an issue and enable the most innovative ideas to emerge. According to literature, a powerful coalition in terms of titles, reputations, expertise and relationships is not necessarily optimal. In addition to department managers, the top management were present in this coalition group, which may weaken the power of the group (Kotter, 2007). A coalition that constitutes of many great titles, and management with well-known reputations could result in monotony within the group. However, according to theory (Kotter, 2007), an important aspect of a guiding coalition is the diversity within the group. An efficient team will consist of individuals from across the organization. This diversity will allow the team to see all sides of an issue and enable the creation of innovative ideas.

Even though management accounted for a large part of this group, the guiding coalition consisted of several key-users, sales people and finance people, which increased the diversity within the coalition. We therefore argue that the coalition group in Husasmidjan was diversified, and according to theory therefore likely to be powerful.

In Husasmidjan the project can be considered more as being a concrete mission than a vision. If Husasmidjan are to follow their philosophy, which is to "recognize the importance of a good beginning in the success of any venture" (Husasmidjan, 2015) it is imperative that they implement this new ERP system. Furthermore, in order for Husasmidjan to keep their market leading position in hardware and home improvements, their company has to keep up with the new technological developments.

Initially, only the top tier of employees at Husasmidjan was involved and knew of the change process. The information was spread through departmental meetings, and weekly e-mail updates from the CFO. This has been a semi-efficient manner of communicating the vision, because the guiding principle says that you should attempt to use every possible communication channel

(Kotter, 2007). In order to strengthen their vision, we believe that the management at Husasmidjan could have exploited their communication channels in a more efficient manner. Furthermore, theory also states "communication comes in both words and deeds, and the latter are often the most powerful form" (Kotter, 2007). We argue that the most powerful thing Husasmidjan did to communicate the change, was to physically start the process by bringing consultants into their offices.

To conclude, according to theory, the change process seems to have been handled well. There has been a high sense of urgency, and a strong coalition group proves that Husasmidjan has focus towards including the entire organization in order to increase the motivation for the change. Furthermore, the change process is in line with Husasmidjan's overall strategy, which entails that this change in the end would benefit the entire organization, and therefore more likely to increase the overall motivation among the employees. These elements facilitated a strong foundation for a successful change process.

### 5.2. Resistance to change

In this sub section we will apply the fifth and sixth steps in Kotter's framework (2007), concerning resistance to change within the organization. In regards to the degree of resistance towards change the findings from the two cases are very different, and likely to be a result of the differences in the project's size and scope. In Landsbankinn, the majority of individuals involved in the change are all part of the team of eight employees. In Husasmidjan, we have a large company with employees spread not only in different departments in the organization, but also in different parts of Iceland. This is likely to have consequence for how the two organizations deal with different types of resistors. This part of the discussion will attempt to identify the resistance towards change in the projects and discuss the associated consequences.

#### Landsbankinn/Miracle case

The team in Landsbankinn did not experience resistance to change from any of the team members. The entire team was involved from the very beginning of the project, encouraged to contribute with their ideas to the process. We believe that this method is one of the main reasons for why the project was executed without resistance from the team members. Although no resistance was observed from the team members, each sprint in the scrum method requires a product owner. The project owner has to be an employee in Landsbankinn that is not a part of the team itself. During the

entire project, the scrum-master had a difficult time engaging these individuals. The source for this lack of engagement may be a result of these individuals not receiving a satisfactory introduction to the scrum method. The lack of engagement and resistance from participating in the scrum method might be a result of the product owners being oblivious to the importance of their contributions for project success.

The fact that Landsbankinn has their own project management office made it more complicated for the team to receive permission to hire an external consultant to help the team with a typical project management issue. Initially, the management was sceptical towards the project, and did not understand the need for acquiring consultancy services from an external party. Top management in Landsbankinn may have been concerned that engaging an external consultant to improve project management processes would result in a few negative things: That Landsbankinn's own project management office would loose credibility, that the employees in the project management office could feel inferior, and that their competence was insufficient.

According to their vision, Landsbankinn has had a special focus towards being very efficient in their IT-operations, while reducing costs. When management shows scepticisms towards hiring a resource person who is able to make the IT-operations more efficient it can be viewed in terms of that management is contradicting their own vision. From another point of view, scrum can be seen as a long-term investment, which in the long term can save costs. In the short-term, the investment of hiring a consultant for a half year can be viewed as a heavy cost. If management view the goal of saving costs on a short-term basis it can explain the resistance towards hiring the consultant. Management has many stakeholders that need to be satisfied, especially shareholders. The shareholders can be concerned with the short-term rather than the long-term perspective.

According to the team leader there had been a celebration after one of the first successful sprints. This can be described as a short-term win and is according to Kotter (2007) one the contributing factors towards a successful project and change management. A curious thing is that the team member in Landsbankinn, when questioned about this celebration, had no recollection of this short-term win described by the team leader. The fact that a celebration of a win was not recognized by the team members either implies that the team member was not present, or that the team leader did not manage to identify that there was a win in the project. According to theory celebrating

milestones is important for a change projects success. Celebrations can be motivating for the employees because they realize that their efforts in regards to the change are giving results. This celebration will therefore contribute towards keeping a high momentum amongst the individuals involved in the change process. In this case we believe that more attention should have been awarded successes during the scrum implementation.

*In sum*, there has been no observable resistance within the team, but the team experienced some resistance from the product owners. The product owners not having sufficient training and education in the scrum process, and therefore not realizing that their lack of participation and engagement is hurting the process, and can explain this resistance. Furthermore, the team has also experienced resistance from top management at Landsbankinn. This resistance can have stagnated the process and reduced the motivation within the team. Lastly, in regards to short-term wins, we believe they should have been awarded more focus in order to keep the momentum up during the project.

### Husasmidjan/Annata case

The responsibilities of the key-users are to engage other employees in the new system, and create a positive energy towards the project. According to theory, a guiding coalition should empower others to engage in the change simply by successfully communicating the new direction. This describes Husasmidjan's intentions of creating a guiding coalition, and is from our point of view, successfully accomplished. In a project with a large scope like the implementation of a new ERP system in a company, which affects and involves everybody in the organization, it is impossible to include everybody in a guiding coalition. Involvement in a guiding coalition is likely to result in that the members of the group will stay positive and be campaigners for success in the change process. Consequently, this should according to theory make the individuals involved in the guiding coalition less likely to become resistors. In order to succeed in overcoming resistance the client organization has to carefully consider who to engage in the guiding coalition.

During the implementation of the ERP system at Husasmidjan, the management did not systematically plan for, and create short-term wins. A pitfall of refraining from doing this is the possibility of the change effort losing momentum if there are no goals to meet and celebrated. In the theoretical review we found that most people will waive from the change effort if they do not see

compelling evidence within 12-24 months that the change effort is producing results (Kotter, 2007). In the case of Husasmidjan there were milestones in the form of go-lives of the different components in the ERP system. To fully extract all the possible advantages from the go-lives, management should have celebrated these milestones; given them more attention than to mention them in the weekly update via e-mail sent from the CFO to all employees.

To overcome and prevent resistance, the role of management in a change management process is very important. In this case we saw that both Annata and Husasmidjan were both focused towards the fact that management had to stay positive on behalf of all the other employees at Husasmidjan. When there were difficulties regarding the project is was especially important for the CFO and the project leaders to stay positive, so that the employees did not loose morale (Sirkin et al. 2005). This would be detrimental for the project, because when there is a negative morale and a bad attitude towards the project it is difficult to recover from and it will most likely inhibit the likelihood of the projects success (Kotter, 2007). In addition, we found some resistance amongst the users of the system. Since both the new and the old systems are still running, some employees are holding on to the old system for as long as possible, only converting to the new system when they are forced to do so as a consequence of the old system becoming inoperative. Thus, they do not have to learn the new system immediately.

In sum, Husasmidjan could have been more concerned with keeping momentum up among the employees by celebrating milestones. This project has a large scope, which has entailed inevitable limitations towards capturing and hindering the creation of resistors, and can inhibit the change process. Management has focused on keeping a positive spirit among all employees in order to increase engagement for the project, which according to theory (Sirkin et al. 2005) very important in change processes. Overall because there was a dire need for replacing the current ERP system has been essential towards the project success, and a major contributor for why there has been a large engagement within Husasmidjan.

## **Introduction to knowledge transfer**

Knowledge management theories will be applied in order to gain deeper understanding of the relationship between the client and the consultant, by analysing the knowledge transfer before and after the execution phase. The knowledge transfer between the client and the consultant is a determinant factor in order for the client to understand and develop knowledge about the new

system, and therefore increase the likelihood of becoming independent. This part of the discussion aims to provide a foundation in order to answer the second sub question: *How have the different parties involved in the projects affected the knowledge sharing?* Firstly, the model proposed by Bessant and Rush (1995) will be used to identify what role the consultant has played in knowledge transfer. Secondly, we will discuss the communication style, and how the training has been conducted. In the last part of this section we will draw upon Chou et al. (2014) in order to assess how the client has managed to absorb the knowledge from the consultant.

### 5.3. The role of the consultant in knowledge transfer

The model suggested by Bessant and Rush (1995) will be applied to analyse and identify what role the consultants in the case studies have played in knowledge transfer.

#### Landsbankinn/Miracle case

In the presentation of findings the professional background of the consultant was presented. The consultant's education and prior work experience within project management and the banking industry, gives strong prerequisites to excel in this project: Experience from implementing the scrum method in similar teams, and working in an IT-department at Islandsbankinn, the consultant is likely to possess valuable knowledge compared to other consultants within the IT-industry. For example, there are reasons to believe that the consultant has a better understanding of the organization and the existing processes in the team. Furthermore, from similar projects it is likely that he has gained valuable insight and knowledge about what implementation methods of scrum that have proven more successful than others.

With the consultant's extensive experience it can be easier for him to identify the root of the challenges in the organization. Which was what the consultant managed to do, as he intentionally was brought in for another purpose. The consultant identified inefficiencies in how the team handled incoming inquiries, and was able to recognize the value of applying scrum. On the other hand, a lot of experience can also entail that the consultant has been paralyzed and stalled in one approach of doing things. The consultant's extensive experience with implementing scrum may cause the consultant to implement the scrum method using the same approach of managing and training the employees as he usually does. Consequently, performing the implementation on autopilot, and overlooking facets of the team, which entail the need for a more personalized implementation.

Another factor that can influence the role of the consultant is the company the consultant is working for. Miracle is according to the consultant himself a company with a strong and positive reputation in Iceland. The award that Miracle has received three years in a row, business of the year in their belonging category, reinforces the consultant's statement. This reputation contributes to the expectations of professionalism of the consultants from Miracle. Furthermore, it is likely to think that a relatively small consultancy company like Miracle has fewer clients than consultancy companies of greater size. This enables Miracle to better serve and monitor its clients, because a smaller size may facilitate better structure and control within the company. The consultant was devoted to this project during the entire process. This indicates that Miracle, and the consultant in particular, has truly focused on the client. This can further imply that Landsbankinn is an important customer for Miracle, leading to the consultant putting in more effort to ensure success of the project. Miracle being a smaller company also makes them more sensitive to satisfied customers, relying on that the clients feel that the project has been successful to ensure a great reputation in a small business market like Iceland.

Bessant and Rush (1995) suggest that to ensure that knowledge sharing continues after the project you should provide the client with a single point of contact, such as a support service. Since the consultant was present at Landsbankinn during the entire project, this has served as a type of support-service. In the aftermath of the project, there has been little to no contact between the client and the consultant. Indicating that the consultant's role as a support-service has been impaired. According to Bessant and Rush (1995), can this result in a gap between technological opportunities and user need. The team is satisfied with the knowledge sharing during the project, and believes that the consultant had thought the team members everything he could. His approach to knowledge sharing has been very explicit; Clear and easy to understand by others. Ensuring that all team members knew what to do and how to do things at all times. All information system projects are complex and require tacit knowledge (Ko et al., 2005). In accordance with the theory, the mix of tacit and explicitly knowledge sharing will contribute to that organizational knowledge is created (Nonaka, 1994).

In accordance with the theory presented by Bessant and Rush (1995), the consultant has successfully transferred knowledge to the client. The direct transfer of knowledge that was already

assimilated from the professional background of the consultant has been transferred to the client. Furthermore, the consultant has been able to transfer knowledge by drawing upon prior and similar experiences. The analytical ability of the consultant to identify the company's needs for change and innovation is also present in this case. However, the role as a "marriage broker" is rather inadequate. As the theory suggest, the client should be given a point of contact to ensure that the knowledge sharing continues after the project. In regards to this case, there has not been any knowledge sharing after the consultant left Landsbankinn. We believe that this have been one of the reasons why the client has not continued with the traditional scrum method, but making a modified version of it.

In sum, we believe that the client has become very independent of the consultant in the aftermath of the project. The client is satisfied with the knowledge transfer from the consultant. We believe that the consultant's expertise has had a positive influence on the knowledge transfer in this project. However, the support-service that was provided in the aftermath of the project was not sufficient. From our point of view, this is a contributing factor to why the client company was soon to start using a modified version of scrum. As soon as new internal changes happened within the team after the consultant had left, the client was not able to incorporate these changes into the project management approach. We argue that monitoring in these cases, for example a type of support-service would have been beneficial for the team in order to seek guidance.

Furthermore, we believe that the client's ability to open up and share information with the consultant is a contributing factor in a successful knowledge transfer (Belkhodja et al., 2012). In this case, the consultant was granted access to the client's intranet, indicating that they wanted him to obtain insight into the organizational culture. Furthermore, the team members were also willing to let the consultant observe how they were working, and give information about themselves and how they ideally would like to work. The consultant felt welcome in Landsbankinn, which is according to the consultant himself usually not the case when consultants enter a new organization. According to Stumpf and Longman (2000), "a successful client-consultant relationship relies on the client's willingness to share authority with the consultant, and to accept the establishment of a long-term relationship based on trust, collaboration, and information sharing".

### Husasmidjan/Annata case

The competence of the consultants involved in this project is more complex than in the other case, since this case involves more people with different educational and professional backgrounds. The consultant from Annata has previous experience being project leader for several other IT-projects. Educationally, the degree in civil engineering qualifies him for design, construction and maintenance of physical things surrounding the environment, like roads and bridges. The master degree in construction management indicates that he has knowledge that is needed for a rewarding management career within the construction industry (Strath.ac.uk, 2015). From our point of view, the consultant has limited educational background that increases his knowledge in regards to technological considerations. He does however have professional experience implementing SAP<sup>4</sup>. This gives him experience in ERP system implementation, knowledge that is likely to give advantage in this project as well.

The consultant does not have any prior experience using Microsoft's ERP system. According to himself is it great variety between SAP and Microsoft's version of the ERP solution. On the other hand, other employees from Annata has experience implementing the ERP solution from Microsoft, but it was the first time the company implemented the latest version of Microsoft AX 2012. Furthermore, the programmers acknowledged that there had been a lot of new upgrades in the 2012 version of AX. The lack of knowledge in the new version is reinforced when the Annata had to seek assistance from programmers working for Microsoft during the project. We therefore believe that the knowledge of the consultant might have been impaired by lack of experience within this latest version, influencing the implementation of the system.

The project leader at Annata informs that he viewed his role as to ensure that everyone knew what they were doing at all times. The size and complexity of the project with Husasmidjan, makes the coordination more demanding, which makes the role of being project leader challenging (Brown and Eisenhardt, 1997). In this project, Annata has used both technical programmers, as well as what they refer to as business consultants. The technical programmers are employees that develop the ERP system, building technical solutions based upon requirements from the client. The business

<sup>&</sup>lt;sup>4</sup> SAP is a German multinational software corporation that makes enterprise software in order to help businesses manage its operations and customer relations.

consultants provide expert advice on how the system should be incorporated into the organizational structure, and teach the clients how to use the new system.

The coordination linking knowledge and people, to the right tasks is an important and challenging task. This requires a lot of structure from the project leader. From our visit and guided tour in the offices of Annata, we noted that they are working in an open landscape. All employees were stationed in the same room; both programmers and business consultants were working interchangeably. From our point of view, this is a great way to better ensure efficient coordination. People interacting with each other in a work related environment increases the likelihood that the employees are given insight about what the other employees are doing. Furthermore, the open landscape is likely to increase the knowledge sharing among the employees, increasing the overall knowledge intensity at Annata. However, if not managed well, it is likely that some of the knowledge and roles will have overlapping functions. We believe that overlapping functions is likely to appear as unstructured for the client, making them question the consultant's expertise of managing the project.

The large diversity in knowledge among the employees at Annata is likely to increase the overall knowledge within the company, making them suitable to handle many different projects. A high number of employees can further imply that the employees are specialized within different fields, contributing to specialized knowledge within the company, making Annata more attractive. Diversity in expertize among consultants can help bridging the knowledge gap, and is becoming normal in the IT-consultancy industry (Bessant and Rush, 1995).

From the interviews with Husasmidjan it is clear that they feel that the relationship with the consultants has been informal. Both business consultants and programmers have been available for Husasmidjan's disposal during the whole period. Even after the go-lives some of them are still present at the Husasmidjan offices. The interviewees from Husasmidjan elaborated on their dissatisfaction in regards to lack of personnel from Annata during the go-live. Annata does not provide any support-services, and competitive consultancy companies have assisted with technical support both during and after the go-lives. Our concerns regarding Annata and the "outsourcing" of the support service are: does the new consulting company have any precondition to succeed in the role as a support service? It is very likely that they are not familiar with the project, and that they do not have the same familiarity and relationships with the individuals in Husasmidjan. This company

providing support services are not familiar with the Microsoft AX 2012 system, which we argue, is a serious issue for Husasmidjan. When Annata eventually leaves Husasmidjan to stand on their own, they become even more dependent on the knowledge and support of their support-service company, which at the current time seems quite risky. We therefore question the quality of this support-solution.

In accordance with Bessant and Rush (1995), we believe that the consultant had assimilated knowledge about the ERP system, but that there were some shortcomings in the knowledge because of the two factors. Firstly, the consultants had incomplete knowledge regarding the latest version of Microsoft AX 2012. Secondly, as a result of Husasmidjan demanding a large number of customized requirements, which Annata were not prepared for, implies an incomplete knowledge before entering the project. This incomplete knowledge will affect the consultant's ability to share knowledge because of reduced experience using this version of Microsoft. However, we argue that the consultants were able to transfer knowledge based on previous experiences with earlier versions of the AX system, a system that shares some similarities to the 2012 version. We believe that Annata has not played a central role contributing to innovation, but has however been analytical in terms of sensing requirements the client was not aware of for the new system. Even though Annata has been available during the entire process they have not taken the role as a "marriage broker", but given this role to another company. However, as theory suggests this is the best solution if the original consultancy company is not able to provide the support-service.

In conclusion, the knowledge sharing seems to have been managed well. Based on the educational background and extensive experience in equivalent projects in the past, we believe that the project leader was qualified to manage this project. The diversified experience and knowledge of the consultancy company also qualifies Annata to succeed in this project. However, the limited knowledge about the latest version of Microsoft AX 2012 has influenced the knowledge of the consultants. We believe that there are reasons to believe that this limited knowledge about the IT-system has influenced the quality of the knowledge sharing to the client. Furthermore, the client has been dissatisfied with the support-service during the project. However, both parties were aware of that Annata did not provide any support-service before the project started.

### 5.4. Communication style

In this section we want to discuss the characteristics of the communication style during the projects.

We believe this is interesting in order to gain a deeper understanding of the knowledge transfer between the client and consultant. Communication and training are highlighted as central features in knowledge transfer (Argote et al., 2000).

#### Landsbankinn/Miracle case

Much of the communication during the project was done either through e-mail correspondence, or in person. According to Roberts (2000), face-to-face communication can help in establishing and reinforcing a relationship, and trust between agents. The interviewees characterized the communication style as informal. The consultant being physically available in the offices in Landsbankinn is likely to result in a frequently communication between the team members and the consultant. According to Reagans and McEvily (2003), frequent communication between two parties can result in an emotionally attachment or relationship between the parties, which again results in more efficient knowledge sharing between the parties. The consultant was granted access to the company's intranet system through a personal Landsbankinn e-mail address given to him during the project. This enabled the consultant to get a deeper understanding of the organization, its values and culture, as well as it makes it easier for both parties to get in contact with each other (Belkhodja et al., 2012). In regards to the information flow in the project, we argue that it is positive that there has only been one consultant involved in the project. Firstly, the team members will only have one point of contact to seek guidance and information. Secondly, it is easier to ensure that the right information reaches the right people.

In addition to the consultant's professional career as discussed earlier in the chapter, his personal characteristics are likely to affect his role as a consultant. The interviewees from Landsbankinn portrayed a man who is open and easy to talk to, who was very determined to create an informal relationship between himself and all the team members. He wanted to create trust and open communication, as he believes that this fosters a good foundation for implementing successful change. The research by Manuti et al. (2015) indicates that in nearly all situations where learning takes place, elements of both formal and informal learning are present. From our point of view, we believe that the consultant has managed to develop an informal relationship with the team members. It should however be noted that the scrum method requires a lot of discipline in order to be successful. The consultant stressed the importance of having discipline, and thus enabled to create a more formal learning situation. By taking both an informal and formal role in the client

organization, the consultant facilitates for transferring both technological competence and managerial capabilities in the client company (Bessant and Rush, 1995).

In accordance with what Manuti et al. (2015) define as best practice for learning; we believe that the discipline that scrum requires, combined with the consultants informal and personal communication style, managed to create an efficient environment for learning. Furthermore, the informal relationship and the widely available consultant can lower the threshold for employees asking questions. We argue that employees asking questions is of great value for knowledge sharing, because it enables the consultant to customize the learning based on individual differences.

In summary, both the consultant and the client agree that the communication has been effective, and that they all have appreciated an informal communication style. An informal communication style can result in that the consultant is able to talk to the clients in a more personal manner, customize the conversation and in this way make it easier for each team member to understand for example different concepts within the scrum method (Almeida and Kogut, 1999). On the contrary, it can make it difficult for the client to distinguish between important and professional conversations, and what is more unimportant. The informal communication style reinforces our image and beliefs about a close and personal relationship between the team members in Landsbankinn and the consultant. The communication style also reinforces what Manuti et al., (2015) regard as important in order to establish organizational learning.

### Husasmidjan/Annata case

The communication style in this case is characterized by being informal. The most frequently used communication tool has been e-mail. Furthermore, we argue that SharePoint has helped visualizing who is responsible for what in the project, making a complex situation organized (Elving, 2005). The communication has mainly been between the project leaders from Husasmidjan and Annata, and the project leaders have the responsibility to redistribute the information in their respective companies. When the communication goes through the company's respective project leaders, it is likely to affect the communication style, making it less formal. We believe that this is a great strategy to simplify an otherwise complex communication. Since Husasmidjan is a large company, the communication has been complex. Consequently, there were a high number of people needing information about the change process. The communication can be lost or distorted when the information has to be communicated through many people.

Annata indicates that the communication between them and the warehouses and retail stores has been difficult. This can be a consequence of that Annata is not physically present in those locations. In other words, there is no direct connection between Annata and the warehouses and retail stores, increasing the chance of loosing valuable information about the processes there. This lost information about the processes is likely to affect how Annata has designed the requirements that were to serve for the processes at the warehouses and retail stores. The failure of the ORS implementation reinforces this thought.

The CFO has also played a central part, communicating with all the employees by sending e-mails every week. However, as the end-users illustrates, most of the information in the e-mails does not concern her department, and she therefore admits to frequently disregarding these emails and not reading them. The information in the e-mails have usually concerned the warehouses and the retail-stores, a relatively small part the total ERP system implementation. Bearing Roberts (2000) practice in mind about the importance of face-to-face communication, we therefore question the value of sending these e-mails, which seems like a relatively bothersome affair for the CFO to write every week.

In sum, the communication with the warehouses and retail stores could have been better. Information being mistranslated and lost between many links makes this communication difficult. This might be a result of that there was no face-to-face communication (Roberts, 2000). In large organization as Husasmidjan, it is crucial that the communication is structured and that a reliable, respected person communicates important information (Elving, 2005). This is something Husasmidjan has completed in a satisfying manner, for example by having the CFO send weekly updates to the organization.

### 5.5. Training

In this part we will discuss how the training and direct knowledge transfer has been from the consultant to the client. We draw upon research and best practices that were presented in the theoretical review.

#### Landsbankinn/Miracle case

In addition to lectures, the training that was conducted in regards to this case can be characterized as hands-on training through a simulation of the new working method. In addition to being a social event, the training that the consultant initiated was held so that the client would gain knowledge about the scrum method. From our point of view, this type of knowledge transfer makes it easier for the user to understand the process, without being too theoretical.

Another thing that we consider to be well-executed during this project was that the consultant gradually gave more and more responsibility to the team leader. In the very beginning of the project, the consultant acted as the scrum-master to illustrate the process. He gradually gave responsibility to the team leader in order to prepare her to become the scrum-master. By doing this, he was able to build up her confidence while he was still present for guidance and adjustment. In the last part of the project, the consultant stayed in the background, ensuring that the process within the team was working well. According to best practice by Bender and Fish (2000) this method positively influences the knowledge of the employees.

The consultant did not provide any written tools or manuals about the method before he left Landsbankinn. When discussing with the team member about aspects regarding the project and potential room for improvement, the lack of tangible learning materials were highlighted. She focused on that receiving something tangible materials, which explained the scrum method, would have been very beneficial. People are very different when it comes to learning (Bransford, Brown and Cocking, 1999; March, 1991). Some people learn best on their own, while others prefer group interactions and team-simulations. The simulation was the only type of common training that the consultant conducted with the team, and the consultant therefore did not facilitate for individual differences in learning within the group (Alavi and Leidner, 2001). According to the consultant himself, people in general only remember 5% of what they are told, indicating a large limitation in how much information the human capacity is able to absorb. This can also be one of the reasons to why the consultant stayed at Landsbankinn for over a half year, because it is very important that the process of scrum is an on going process for a long period of time so that individuals can get the method under their skin (Beer and Nohria, 2000).

However, the consultant informs that he has introduced the team members to articles and web pages that address scrum. Neither of the team members included any information about this when we asked about training, and we are therefore tempted to believe that these articles have not been of any use or value for the client. It might have been easier for the consultant to encourage the team members to read these articles while he was present. When he is not there the employees have little motivation and incentive to continue the training sans the consultant. This is likely to result in that the employees start to forget elements of the method.

In conclusion, we argue that the training in this case has been well executed. Because of the availability of the consultant, the training has to some degree been on-going during the whole implementation (Bender and Fish, 2000; Reich et al., 2008). The consultant has throughout the entire project been available for guidance, which seems to have been something that the team appreciated, and something they considered to be of great value. We believe that the simulation that was conducted early in the process was something that increased knowledge for all members, because they were able to experience how the scrum method ideally should work. Furthermore, we argue that how the consultant gradually gave more responsibility to the team leader while he was still there to assist was a smart way to pass on his personal knowledge. We do however believe that the consultant should have provided the team with some tangible materials about scrum for them to use when training the new members. From our point of view, the facilitation for newly hired team members appears poorly managed by the consultant. We argue that the knowledge transferred to new members would have benefitted from a more structured and coordinated training, possibly from one of the original members, which could have been trained to do so while the consultant was still present.

### Husasmidjan/Annata case

The training in this case was structured in a way that Annata was to give lectures to the key-users in Husasmidjan. The key-users were responsible for the training of the rest of the employees. In this section we will evaluate the training from Annata to the key-users, which is also referred to as a method called "train the trainer". From the interviews it was clear that all interviewees from Husasmidjan were dissatisfied with the training from Annata. Both Husasmidjan and Annata agree that the training started too close to the go-lives. The training sessions were initially planned to be conducted earlier in the project, but as a result of several things the training was delayed. One reason for this delay was the amount of extra requirements from Husasmidjan, which were not

initially planned for. These requirements demanded a large amount of resources, and additional time to solve for Annata. In addition, there were technical difficulties in the initial phase of the project, which held the progress back. Thirdly, the size of Husasmidjan and the large number of employees who are in need of training is high, compared to the number of key-users, which were engaged to train in this project. Overall Husasmidjan are under the perception that the training provided from Annata was both insufficient and inadequate.

Additionally, from our point of view it has been visible that the size and complexity of Husasmidjan has affected the value of the training. Is appears to have been unclear who has been responsible for the training, and at what times in the course of the project the training was to take place in the different departments in Husasmidjan. Furthermore, it is probable that the variety of different employees with various knowledge-levels in regards to technical systems has been problematic to identify. Generalizing assumptions had to be made, thereby reducing the quality of the education (Alavi and Leidner, 2001). Lastly, if the training of the key-users in the first place is delayed, this can result in poorer quality in the training as a result of time pressure. The organizing of the training will therefore be more difficult.

Furthermore, the interviewees from Husasmidjan believed that the training itself could have been better. The training of the key-users had happened in a classroom at Husasmidjan. According to the CFO there was not enough computers, resulting in that several people had to share computers. Arguably, not an efficient way to conduct the training. We believe that the training from the consultants to the key-users could have been better. All the interviewees from Husasmidjan expressed that they would have appreciated some handwritten manuals for the training. They all feel that this would have made it easier for them to continue learning the new system, and not be so dependent on assistance. We argue that the way things are handled today is inefficient. If program errors occur, the employees have to send an email to a joint e-mail account, and someone will forward the problem to (hopefully) the right person. As oppose to having in-house expertise about the IT-system, this is a time-consuming process, which is likely to delay the employees if the problem in the system prevents them from doing their job.

One reason behind the bad training, and that the consultants were not able to provide any written manuals can partly be explained by that it was the newest version of the Microsoft AX system that was implemented. The consultants might have had some uncertainties about the program

themselves. This thought is reinforced by the fact that Annata needed assistance from Microsoft, and were reliant on the manuals from Microsoft throughout the implementation. The uncertainty about the program is likely to influence the consultant's ability to teach the key-users.

The project manager from Annata informs that this particular project required a lot of additional resources from them compared to what was anticipated at first. This project has been difficult for the consultants, and has influenced the motivation from several consultants at Annata. We argue that this have affected the quality in training. The CFO of Husasmidjan highlights that he experienced that the consultants from Annata were always in haste solving technical problems. After solving the technical problems, the consultant would move on to other problems, without teaching or training the employees.

In sum, we argue the training in this case has not been optimal. Even though the end-user felt that she could frequently seek guidance from the consultant, she also knew that this was not common amongst her colleagues. Technical difficulties and the unforeseen time spent on creating additional requirements in the system caused delays in the training. From our point of view, the training should have been facilitated in locations where all employees had access to their own computer, in order to increase the efficiency during the training. The training appears as unstructured and rushed. Furthermore, we believe that the client should have been equipped with user-friendly manuals that could help them learn about the program, without being very dependent on either the key-users or the consultants.

## 5.6. Knowledge sharing within the client company

When establishing insight about the knowledge sharing within the client company we draw upon the theory suggested by Chou et al. (2014). According to Ko et al., (2005) the knowledge related to implementation of a new information system is complex and mainly tacit, i.e. personal and technical embedded in individuals. As a result of tacit knowledge being difficult to observe, managers must rely on that the employees voluntarily share knowledge with each other, and the consultant.

#### Landsbankinn/Miracle case

The team from Landsbankinn consisted of eight members. A good relationship within a small team is likely to create close ties. According to theory, the social capital in these close ties within a team

form a good foundation for knowledge sharing within a company. A positive effect of being a small team is that it is easy to know what the other members are doing at all times. This is something we believe is of great value during a change process, where situations often can seem unstructured. In addition, people know each other's strengths and weaknesses making it easier to allocate tasks based on personal merits, and in that way ensure more efficient project management.

Since the consultant left the team there have been large changes within the team: only two of the original team members are still present. New members in a team results in that the relationship within the group is changing as well. The members do not know each other as well as the prior team did, which can infer that there also will be a reduction in the degree of trust within the new group. Keeping the theory in mind this can reduce the knowledge transfer within the team because people do not want to contribute to sharing knowledge with each other if they do not trust people with this information. We argue that in order to succeed with scrum, the team is dependent on every member having sufficient knowledge about scrum, which can increase the team member's motivation for knowledge sharing (Goh, 2002). The original team members experienced positive affects of using scrum approach, and are therefore likely to have motivation to share their knowledge on method. Furthermore, the team member informed us that she thought it was difficult to share information with the newly hired employees. Partly because she felt that they did not fully understand the scrum process. In addition, the team member felt that she was not competent and knowledgeable enough to conduct the training of these new employees. Especially compared to the positive experience she had with the consultant as a teacher. However, this can be an indication of that she is not comfortable enough with the method, which again can be a result of that she has forgotten some things about scrum, or that she did not truly understand it while the consultant was present.

Another element that we want to discuss is in regards to the new employees and that during the summer, the original team had started making alterations to the scrum method. When entering into a new job, it can be easier for the new employees to identify new ideas regarding how to do things more efficiently. Since the team already had started making alterations, we believe that the threshold for making additional changes was lower. If the consultant had still been present in the team, or have had some monitoring in the aftermath, he could have ensured that the team had continued on the same path, keeping up the discipline. In addition, using the scrum method requires a lot of discipline and resources from all team members. This can be both demanding and

exhausting over time, and therefore difficult to maintain. The team member also told that it took a lot of her working hours to teach the new members about scrum, and that this affected her ability to keep up with her other responsibilities. Furthermore, once the team member is of the opinion that she is not qualified enough in scrum to teach others, it is likely that this belief will affect the quality of the knowledge sharing. According to the theory proposed by Chou et al. (2014), this poor self-efficacy reduces the knowledge sharing within the client company. This can also be one of the explanations why the team is practicing a modified version of the scrum method today.

We also argue that the motivation of the new members is impaired. They have not met with the consultant and therefore have no connection, or relationship to him. It is likely that the original team members are not able to convey the motivation and reasons for doing scrum as the consultant did, and then will not truly understand the value of doing it. In addition, the new members have not witnessed the improvement that the original members saw in the beginning of the project.

In respect of the theory proposed by Chou et al. (2014), there are many elements in place for great knowledge sharing within Landsbankinn, such as size, social capital and intrinsic motivation. We do however believe that Landsbankinn's system usage, their ability to adapt the new system into the business model, needs to be revised. In accordance to theory, a change in the social capital is likely to change the trust between the employees (Chou et al., 2014). We argue that this change reduced the trust between the team members, and thus harmed the knowledge sharing within the group. Furthermore, it seems that the members feel insecure about system, influencing the group's self-efficacy. We were not able to recognize any extrinsic motivation among the employees, which is in accordance to theory. We do however believe that the team members had some intrinsic motivation at the relevant time by viewing the development in efficiency of handling incoming inquires. However, intrinsic motivation can change over time. Based upon our findings and conversations with the team members we felt that the spirit and belief in the scrum method had changed since the consultant was present, thus influencing the motivation within the group.

*In sum,* we argue that the reason for the group not managing to continue with the traditional scrum is partly a result of the internal changes of the composition of the team in the aftermath of the project. Indicating that there were difficulties in transferring the knowledge that they had obtained from the consultant to the new members. In addition to the consultant failing to facilitate for further

learning, by not providing tangible learning materials, we argue that low self-efficacy has been one of the reasons for why it has been difficult for the team to continue transferring knowledge and learning in the aftermath of the project (Bessant and Rush, 1995).

### Husasmidjan/Annata case

The knowledge sharing within the company in this case has been different. Husasmidjan has over 450 employees where all of them are affected by this change. All parts of the business are using this new ERP system. The knowledge sharing within Husasmidjan was intentionally going to be organized around the key-users: the key-users were to share the knowledge that they had assimilated from the consultants, to the rest of the organization. Annata trained approximately tenusers at Husasmidjan, and these key-users were responsible for teaching the other employees. In the training section we identified inefficiencies in the training from Annata to the key-users. Now we are turning to how the knowledge transfers from the key-users and the key-participants in the project, to the rest of the company.

The first thing that crosses our mind in regards to knowledge transfer within the company is that the number of key-users seem too low in order to be have the responsibility for training 450 people. We believe that this is likely to reduce the quality of the method "train the trainer". As we identified when we discussed the training, it is likely that the knowledge from the consultants have been impaired to the key-users, influencing the overall knowledge of the key-users. Secondly, the key-users being responsible for that many people, and the poor facilitation in the offices at Husasmidjan, is likely to influence the quality of the training from the key-users. Furthermore, Husasmidjan moving into a top seasonal period for business will put the training on hold during the spring and summer period. This is likely to result in a lower utilization of the system during these months. When the key-users are responsible for conveying the knowledge from the consultants, the information has to go through several employees before reaching the end-user. The information is more likely to be lost and interpreted, than if the information had come directly from the source (Annata). This is likely to reduce the quality of the training.

The key-users have gone to great lengths in order to facilitate for better knowledge sharing within Husasmidjan. This was something that was not necessarily expected from them, or something that they received any tangible rewards for. The key-users have been given the responsibility to transfer

knowledge. From our point of view, this is viewed as an important task within the company, involving great responsibility and respect. This is likely to positively affect the key-users motivation for ensuring that knowledge is shared. The lack of manuals resulted in that the key-users have made short-videos explaining how to use different parts of the system. The end-user informed that she and other colleagues thought this was a very good way to find answers if they experienced any difficulties with the system. We think that this idea is a smart solution for handling knowledge transfer within a large corporation, but it is of course associated with an investment of both resources and time. Therefore, this is something that most likely could be executed for the most used and difficult parts of the program, but is not something that could be done for the entire ERP system.

There has not been a good enough facilitation and organization for the training from the key-users to end-users to be successful. Husasmidjan does not have enough computers in order for all the users to try the system themselves while conducting the training sessions. This implies that the facilitation for knowledge sharing is somewhat impaired in the offices of Husasmidjan. Furthermore, the ERP system is so complex, that nearly all the departments will be using different parts of the system. According to the end-user, the training that she received from the key-users was very general and was primarily concentrated on how to search for things and how to navigate the system. Reinforcing the though about inefficient training within Husasmidjan.

It appears that the knowledge transferred within Husasmidjan has suffered. By drawing upon the theory proposed by Chou et al. (2014) we are able to gain a better idea of factors that can have influenced the internal knowledge sharing. As we have illustrated, the motivation within the key-user group seems to have been present in this case. However, the other employees' motivation is difficult to address. It is likely that the end-users only have the motivation to learn the system for their own use and utility, and it is less likely that they will contribute to any further knowledge sharing within Husasmidjan.

Furthermore, Husasmidjan being a large organization could affect the social capital. Resulting in that employees working in different departments do not know each other. However, based on our interviews we believe that it is not very likely that people from different departments will interact with each other, especially in regards to this ERP system that handles every department separately. Furthermore, because of the delayed and deficient training from Annata, the key-users might not

truly understand the system. This is likely to influence their confidence in teaching others, which affect their self-efficacy. Furthermore, the key-users have been given the responsibility to transfer knowledge. From our point of view, this is viewed as an important task within the company, involving great responsibility and respect. This is likely to positively affect the key-users motivation for ensuring that knowledge is shared.

In sum, we argue that the knowledge sharing has been challenging in this case. Mostly as a result of the size and complexity of this project. Even though, we argue that there were too few key users assigned to train 450 employees, we argue that the key-users have done a very good job transferring knowledge within Husasmidjan. However, without enough computers to train the key-users, we argue that management in Husasmidjan has not facilitated enough for the training. The training from the key-users has therefore not been sufficient, as the key-users were not given adequate tools or enough time to conduct the training sessions. We believe that this was a result of that the training was rushed between Annata and the key-users, which has influenced the quality of the training from the key-users to the rest of the employees. Furthermore, we believe that the creation of short videos is a smart way of transferring knowledge in this complex project with many different employees (Alavi and Leidner, 2001). However, we question if the creation of these videos are sustainable in the long term, when taking effort and costs into account. In relation to the theory by Chou et al. (2014), it seems that the motivation for knowledge sharing among the key-users has been sufficient. However, that restricted knowledge in regards to the system will affect the training because the key-users do not understand the system, which is a result of poor training from Annata.

### Relationship

In this section we will try to identify the relationship between the client and the consultant by drawing upon theoretical best practices within the themes expectations. By doing this we are able to identify the type of relationship that characterizes the two cases, and answer the third sub question: How can human aspects in the client-consultant relationship affect the success of the project?

# 5.7. Expectations and Trust

In relationships there are likely to be many different expectations, and the client-consultant relationship is no exception. The theory proposed by Ojasalo (2001) will be applied in order to address the client's expectations in the relationship with the consultant. Furthermore, trust was identified as a major determinant of success in the client–consultant relationship Belkhodja et al.

(2012). Expectations and trust between client and consultant will be examined in order to evaluate the relationship.

#### Landsbankinn/Miracle case

In the Landsbankinn/Miracle case the client admits that they were aware of that the existing processes were not optimal. However, they did not know how to change the system. It is difficult to be able to identify your problems when you have a subjective role in the process: It can be very difficult for people to acknowledge that the method that you have been using for a long time is not optimal. The team had been handling incoming inquiries and conducting their projects, in the same way for a very long time. Still the team was unable to identify what elements of their working processes that were the source of trouble. When the client has incapacity to clearly identify the objectives, this can be categorized as what Ojasalo (2001) defines as fuzzy expectations. It will therefore be difficult for the consultant to truly understand what the client really expects, because they will have trouble defining it, even for themselves. The consultant therefore has a harder time trying to understand the client's expectations. However, the members were able to observe the positive affect the scrum method had on team 1, which is likely to influence their expectations and assuming at least an equal success in their team, increasing the overall expectations to the consultant. Furthermore, the reputation of the consultancy company, and the consultant's professional background, is likely to reinforce the expectations to the consultant, his tools and methods he suggest to solve problems.

According to the consultant one of the key success-factors of scrum is being able to trust the system. This indicates the importance of trust in this case. The consultant highlighted that in order to create trust in a relationship, all the involved parties must respect each other. The respect in this relationship is created through dedication to this project, both from the consultant and the client, illustrating the commitment for this relationship (Solomonson, 2012). Both parties wanted this project to excel, and dedicated time and effort from the very beginning. Even though Miracle has prior experience with Landsbankinn, the consultant has no relationship with any of the team members. All parties are therefore new to this relationship, and the trust has therefore to be built. From our point of view, it seems like the consultant has used a lot of resources building trust within the client company. He has spent time getting to know the organization, and the organizational values and culture, reinforcing his commitment to this project (Belkhodja et al., 2012). Furthermore, the consultant has spent time getting to know each and every team member, both

professionally and personally. This is a time-consuming process, but is still manageable because of the small size of the team.

The team members felt that the consultant shared all his knowledge with them, and truly expressed that he wanted to help the team succeed. This is likely to contribute to creating trust between the consultant and the team members. Furthermore, the experience of the consultant, and reputation of Miracle can to contribute to the client trusting the consultant's method.

From another point of view, when the team opened up to the consultant and did not show any resistance, but rather gave him access to the intranet and included him for social events, it is likely that there has been a mutual trust in the relationship. According to best practice mutual trust between the client and the consultant is a key ingredient to a successful implementation (Schein, 1979).

To conclude, we argue that the expectations of all the original team members were high throughout the project: Partly because the team had witnessed success of doing scrum in team 1, and partly because of the known expertise of the consultant. In addition, there was a mutual trust in the relationship, which facilitates a strong relationship (McGivern, 1983). The trust in the relationship was also created as a result of that the team 2 witnessed what the consultant accomplished with team 1, indicating that trust and expectations are closely related. Furthermore, both parties appear to have been committed and dedicated towards this project, implying that the relationship contains mutual respect and trust (Solomonson, 2012). However, in regards to the new members, the trust will not be transferred, because they do not have a relationship with the consultant. This can imply that they do not have the motivation to acquaint themselves about scrum, affecting the team's engagement to scrum.

### Husasmidjan/Annata case

In the case of Husasmidjan and Annata the client knew that the IT-system had to be changed. However, during the diagnostic phase the client was not able to recognize all the requirements they wanted for the system, indicating fuzzy expectations (Ojasalo, 2001). However, some of the requirements that were not recognized during the first phase were missed because they seemed so obvious, that the client assumed they were automatically included in the new system. The client therefore did not think it was necessary to include it in the requirements list to Annata. This misunderstanding can be viewed in terms of what Ojasalo (2001) refers to as implicit expectations,

indicating that the client is aware of what he wants from the project (the expectations), but is not able to clearly define the objectives/expectations. The client was not able to communicate these expectations to the consultants, resulting in that the consultant needed to "take a proactive stance to clarify the clients' expectations" (Ojasalo, 2001). We argue that luckily for the project, Annata anticipated the risk of this happening, and were quick to initiate a second diagnostic phase. This can also be a result of that the consultant's prior experience.

We do believe that the client had great expectations to the consultants. We have however discovered that expectations changed during the project. Some events during this project can have negatively influenced the expectations Husasmidjan has to the consultants. Referring to one of the first build-ins into the ERP system, the ORS solution that failed. Because this happened so early in the process, it might have given Annata a sour start, affecting the client's expectations for the rest of the project. Furthermore, since the go-live in January there have been multiple defects and challenges in regards to the warehouse and retail stores, negatively affecting the clients expectations. In addition, since Husasmidjan had to seek guidance from Microsoft, and use the manuals themselves in order to solve issues, the consultants can be perceived as uncertain. This uncertainty was something that was perceived by the client, and can have resulted in that the client lowered their expectations towards the consultant.

As regards this case the project leader at Husasmidjan has prior relationships and ties to several employees in Annata. This entailed that a certain degree of trust was already established before the project was even initiated. These prior ties will influence the relationship from the very beginning, because people who know each other from before are likely to already have established an impression about the other person, independent of this project. In addition, trust was built during the competitive tendering process. By using a middleman that Husasmidjan trusted, there was already established a degree of trust between the parties, as Husasmidjan was certain this middleman only would recommend good candidates. During the tendering process Husasmidjan was able to observe what the different consultancy companies were able to offer. The consultancy companies performed a demo-session of how they would incorporate Husasmidjan's requirements into the Microsoft AX 2012. Through this "test-drive", both parties had the opportunity to experience how the partnership between them would potentially be. In addition, according to the consultant from Annata, trust was also gained in the relationship by building ties during the competitive tendering process.

Furthermore, the large size of this project will affect how well you get to know the parties involved. Both project leaders expressed that they had developed a good relationship between each other with mutual trust for each other. Both Annata and Husasmidjan have many employees. It is likely that the employees from Annata have been rotating within Husasmidjan, spending less time with the different employees. In that way they have had less time creating a relationship with the employees, making the relationship more superficial. Trust in these situations is likely to be coloured by this type of relationship.

The end-user was still positive towards this project, indicating that she trusted that the project would reach completion very soon. She had also had a positive experience with the consultants, and felt that she trusted them. However, she also informed us that the employees working in the warehouses and retail stores were still experiencing difficulties with the system. This can be a result of that the consultants have not been present in the warehouses and retail stores. This indicates that there has been no relationship with that part of the client organization and the consultants, and that the consultants have had less possibility of understanding the processes in the warehouses and retail stores. Resulting in a lot of technical failures (bugs) in the system. It should be noted that trust could be related to expectations, and is something that could change as a result of events during the project: Difficulties in the IT-system are likely to affect the expectations that the client has to the consultant. How the consultants have handled these difficulties influences in what degree the client trusts the consultant. Despite of many difficulties in this project, we believe that Annata has done the best to their ability and situation.

In sum, it is likely to imagine that the client's expectations increase with the reputation of the consultancy company. Working with a well-known company like Annata, a company that has proven successful in previous projects is likely to increase the expectations of the client (Greyser, 1999). In this case we believe that the expectations of the client has to some degree changed during the project. Challenges and events during the project may have downgraded the expectations of Husasmidjan. As we have established, expectations and trust are closely related to each other: Although there have been difficulties during the project, both parties informs that they trust each other.

### 5.7.1. Categorizing the relationships

Drawing upon the discussion on expectations and trust, and the framework proposed by Schein (1978) we want to address the type of relationship that has existed between the clients and the consultants in the two cases. The type of relationship will have a great impact on the success of knowledge transfer, and therefore the success of the project.

#### Landsbankinn/Miracle case

In the Landsbankinn/Miracle case we discovered a mutual trust, a friendly and informal relationship and great knowledge transfer between the client and consultant during the project. From our point of view, this relationship does not perfectly fit into Schein 's (1978) framework. The relationship contains characteristics from two of Schein's models he proposes in his framework, hinting to the process-consultation model and the doctor-patient model. In the process-consultation model, the characteristic regarding the consultant providing a framework or a methodology in order to help the client is similar to this case. Furthermore, this model also suits this case because the consultant quickly gave responsibility to the whole team, while he remained in the background. Weaknesses of this model are that the model is more concentrated on that the consultant acts like a facilitator, and that the client has to provide much of the expertise. In this case, the client does not have any prior expertise in regards to scrum. Furthermore, the model does not anticipate a relationship between the client and the consultant, including trust and expectations, which we argue have been central features in the relationship. The doctor-patient model does however anticipate a relationship that is based on trust and good communication. Furthermore, the consultant plays a central role in uncovering the client's organization problem, solving them using his experience, knowledge and diagnostic ability.

In sum, we think that the doctor-patient model is best suited for this case, but argue that the model neglects some elements that were better captured in the process-consultation model. This type of relationship facilitates effective knowledge sharing between the client and consultant. We also acknowledge some shortcomings in the model proposed by Schein (1978). However, all relationships are unique, depending on many different aspects, both personal and situational. This is what makes relationships so difficult to address, and why it is difficult to develop a framework that applies to all. Because this relationship is built on trust, collaboration, and information sharing there

is according to Stumpf and Longman (2000) a good foundation for success within knowledge sharing.

### Husasmidjan/Annata case

The relationship between Husasmidjan and Annata can be illustrated best through the doctor-patient model. The patient (the client) knows where it hurts (an old and out-dated system), but has no ability of doing anything in order to make it better (to implement a new system), and therefore consolidates with the doctor (the external consultant). The client had to some extent an understanding of what he wanted for the new system, but because Husasmidjan has no IT-department or any knowledge in order to assist in this process, they were dependent on external assistance. Furthermore, both parties characterize the relationship as informal and friendly, while they still have kept a professional tone.

To conclude, the doctor-patient relation is characterized as a personal relationship. A personal relationship is likely to contain a mutual trust (Schein, 1978). When there is trust in the relationship, the consultant will go to great lengths in order to make sure the client succeeds (Argyris, 1970). We therefore believe that the consultant has every intention to make the client as satisfied as possible. For this case, meaning that Annata would want Husasmidjan to master their new IT-system as best as possible, after they are done implementing it.

### 5.8. Current status of the project and client satisfaction

In order to finalize Kotter's change model (2007), the last part of the discussion will concern the aftermath of the cases. The final two steps in Kotter (2007) concerns the processes of internalizing the new approaches into the client's routines.

#### Landsbankinn/Miracle case

Today, the Landsbankinn team is using a modified version of scrum, which they to a certain degree are satisfied with. We felt that the original team members acknowledged that this modified version was not as optimal as the traditional scrum method is, but was a solution that the team managed to follow over a longer period of time. It did not require as much discipline and additional effort to adhere to, but is on the other hand also viewed as a "second-best solution" by the team members. From our point of view, there can be several things that have affected how successful the internalizing of the scrum method has been. Even though the consultant was present for a long time,

and the team leader appeared to be confident using the scrum method, there is reason to believe that something went wrong during the separation. The client was soon to make several modifications to the scrum method without the awareness or assistance of the consultant.

Not long after the consultant left, the sprints became longer in order to prepare for summer vacation and reduced capacity within the team. After the summer, more changes were incorporated into the working method; amongst other things they stopped using product owners. The changes in the system resulted in that the team again had to adjust their working methods. In retrospect these changes have according to the team member in Landsbankinn not been ideal. We believe that the team could have consolidated with the consultant before they started making these changes. It is likely that the experienced consultant had experienced the same challenges in similar cases, and therefore could have advised the team through the changes. There can be many reasons to why the team did not manage to continue with the scrum method. From our point of view, it seems like the consultant did not facilitate for internal changes of the team members. The lack of manuals made it difficult for the team to teach the new members. However, it can be discussed whether this has been a weakness from the consultant's side, or if it is a result of a lack of clarified requirements from the client's side. Evidently, there has been a miscommunication regarding this.

Another reflection is that the members have not truly understood all the facets of the scrum method and therefore have difficulties seeing the true value of it. The internal changes within the team are likely to reinforce this feeling. If the original team members have difficulties teaching the new members, the quality of the training is negatively affected. This is likely to affect the quality of the new employees in regards to using scrum, which again will influence the results. When the results go down, the motivation within the team will fade. As we have stated, scrum requires a lot of discipline and effort. Without motivation and results, we believe that it is difficult to continue using scrum. We argue in the retrospect of this project that since the client performed a lot of modifications to the original scrum approach, the implementation was not in accordance to what was initially planned by the client or the consultant. These modifications can be a result of that the scrum did not did not get a chance to seep into the bloodstream of the corporate body before the consultant left, which is unfortunate (Kotter, 2007).

In scrum methodology, it is very important that the product owner can convey his priorities to the team members. The product owner is also crucial for steering the team members in the right

direction. A natural consequence, one that has been observed in the team, is when this crucial person is missing in the scrum-process the team can more easily loose focus (Pries et al., 2007). Other tasks and responsibilities that the product owner has which disappeared and had a negative effect on the scrum-process are: that no one communicates the team status, nobody is in charge of organizing milestones, and nobody is in charge of negotiating priorities, scope or the schedule. The product owner is supposed to be responsible for being the middleman between all the stakeholders in the project, so when the individual performing these tasks and responsibilities disappears the effectiveness of the process will reduce considerably. As a consequence of moving away from a rigid method like scrum, which requires a lot of discipline in order to give results, making unsupervised alterations is likely to influence the positive effect that the team experienced while the consultant was still able to supervise.

In sum, the client and the consultant seem satisfied with the cooperation. Both parties have expressed that they would prefer to work on a project together again in the future. We believe that much of the success in this project is a result of the strong relationship that was created between the client and the consultant: high expectations, trust and a personal relationship resulted in that the consultant became a natural part of the team and the team's dynamics. This facilitated an effective knowledge sharing (Belkhodja et al., 2012). However, even though there has been a strong relationship we argue that the end-result of the project could have been better.

### Husasmidjan/Annata case

As of May 2015, the project is still not finished. A number of programmers and consultants from Annata are still present at the offices in Husasmidjan. There are a lot of technical challenges in the warehouses and retail-stores in connection with the go-lives, maybe because the go-live happened too early. Husasmidjan decided to go live with the system March 1<sup>st</sup>, even though Annata believed that this was too early. However, because of the peak-season for Husasmidjan they were forced to go live at this date in order to secure full utilization of the peak-season in terms of great sales.

Management at Husasmidjan needs to be cautious of declaring victory of the project too soon. If Annata withdraws from Husasmidjan too early, the implications can be severe. We are given the impression that Husasmidjan is very vulnerable to deficiencies in the system. If something goes wrong, they are very likely to be dependent on external help because of the lack of technical

expertise in-house. As of now, we believe that the consultancy company that will assist as a technical support service for the future, needs to spend time to really understand the ERP system, and the organization, before they are of any great value for Husasmidjan.

In addition the constant changes and alterations to the ERP system has made it difficult for the employees to have a stable system during the project. The process has for a majority of the employees been unpredictable, and this can easily lead to demotivated employees. This was a large investment for the organization both in monetary terms and additional effort from all the employees. The employees in Husasmidjan had no choice, but to start using the new system. Although we discovered behaviour that was quite anticipated based on the theory. A number of Husasmidjan employees were reluctant and not excited towards familiarizing and educating themselves in the Microsoft AX 2012 system. Some resistors attempted to use the old system for as long as possible. However, there is only a question of time before they all have to use the new system because the old system will stop working.

Another issue regarding the implementation is the fact that the company is of a considerable size, which can infer practical problems. For example, we have already clarified that as a result of lack of planning the training has failed at Husasmidjan, and one could speculate what other consequences this lack of training actually will entail. The most plausible consequences are a reduction in efficiency when using the system, and an unnecessary amount of user-errors in the future. A consequence of Husasmidjan currently being in their peak season, they have postponed all further training until after the summer, indicating that the management team has time to prepare and plan for a more optimal way to conduct the training (Bessant and Rush, 1995). The key-users will have time to prepare themselves, and to create more short-videos.

In the end of this discussion we want to discuss how this project has influenced the employees at Annata. According to the consultant it has been a very frustrating period for all of them. The moral and spirit have been affected, and the programmers and consultant have worked 24/7 in order to finish this project. This frustration and constant time-pressure is likely to result in a demotivation among the employees from Annata, and demotivated employees will not contribute to knowledge sharing (Chou et al., 2014). An unfortunate thing, since it can be argued that a considerable amount of the learning starts in the end of implementation-phase, when users actually start using the system (Chou et al., 2014).

In conclusion, Husasmidjan seems satisfied with the cooperation with Annata. They believe that they are a professional consultancy company that has handled everything in the best way they can. Husasmidjan is positive towards a new project with Annata. However, both Annata and Husasmidjan agree that this project has been very challenging, hoping that none of them will have to experience the same thing again in the immediate future.

## 6. ANSWERS TO SUB QUESTIONS

In this chapter we will seek to answer the three sub questions. These answers are related to the discussion presented in the previous chapter. In the next chapter of the thesis we will apply the main findings from the answers to the sub questions in order to answering the research question.

## 6.1. Sub question 1

How has the change-process been unfolded, compared to traditional change management theory?

When answering this question we are exclusively referring to change management theory proposed by Kotter (2007).

Although the two cases have been successful in regards to the change process, not everything has been executed in accordance to traditional change management theory. The team in Landsbankinn wanted to improve their working methods in order to improve efficiency and satisfy other departments within Landsbankinn, and therefore felt a strong sense of urgency for conducting the change. In addition, Husasmidjan experienced a strong sense of urgency as their current ERP system was facing extinction. Theory suggest that the creation of urgency is important in order to engage the individuals involved and prepare them for change. In both cases there were strong, but different coalition groups, facilitating enthusiasm and motivation for the rest of the organization. The change process in Landsbankinn only affected the participants of the team, whereas the ERP implementation in Husasmidjan impacted everyone in the organization. As a consequence, the latter project needing a larger coalition group, which according to theory is a key success factor.

In regards to creating a vision, Landsbankinn had a strong and clear vision, which was in line with one of the organization's overall goals, making the vision for the project even stronger and more likely to be taken seriously. The strength of Husasmidjan's vision was very similar to Landsbankinn, clear and easy to understand. A strong vision is important to facilitate change process. Furthermore, theory highlights the importance of communicating the vision. The small size of the team at Landsbankinn made it simpler to communicate the vision for change, and the team leader appears to have completed this in a satisfactory manner. By successfully communicating the vision the team will become more prepared for change and motivated for initiating the execution of the project. Management at Husasmidjan did an acceptable job at communicating the vision, by arranging department meetings and sending weekly e-mails to all 450 employees, the status of the project was communicated throughout the change process.

In regards to resistors and obstacles for change there have been a few difficulties. There did not appear to be any resistors within the team in Landsbankinn, but there were issues in regards to the product owners and their lack of engagement and participation in the projects. In addition, the team experienced resistance from top management in relation to potentially rehiring the consultant for a limited period of time. In Husasmidjan, the possibility of any resistors was nearly inevitable. There were some observable resistors in the form of employees postponing the adaptation from the old to the new ERP system. Management tried their best to keep a positive tone in Husasmidjan, which is central according to theory. Resistors are dangerous to a change process, because it only takes one resistant employee, to negatively influence other individual's beliefs about the project. In regards to theory, both companies were unsuccessful when it comes to creating short-term wins to celebrate milestones during the project. Neither company appear to have devoted resources towards this concept, which can create engagement and keep momentum up in the project. However, from our point of view, this absence has not resulted in any damages for the projects, indicating that this part of theory have been of less importance in these changes.

In the final phase of the project, trying to institutionalize the new approach, we observed that things have been conducted in a less satisfying manner. In Landsbankinn there was implemented unsupervised modifications to the scrum method not long after the consultant had left the team. Inferring that the team poorly managed consolidating the improvements implemented by the consultant and institutionalizing the new approach. At the current time in Husasmidjan, the system

is not completely developed and finished, and they are therefore still to manage the internalizing of the system into their operations. However, the internalizing of the new system will somehow be forced because the old system will close down eventually. The question is therefore how well the employees manage to get full utilization of the very expensive investment, which is likely to be a consequence of the quality in training after the summer.

In conclusion, after the two projects have been measured up towards best practise (Kotter, 2007) we can conclude that they have both been relatively successful. Although not everything has been conducted in accordance to theory: Most of the difficulties have been in the last steps of Kotter's framework, referring to how well the client is able to internalize the change into current operations. This internalization has great influence on how well the client is able to get full utilization of the implementation, which we argue will influence the degree of dependency. To investigate the internalization processes further, we need to examine the knowledge transfer towards the end and in the aftermath of the project.

According to theory and best practice, to make this internalization more successful, both Landsbankinn and Husasmidjan could have celebrated more milestones during the process. Furthermore, both the team leader in Landsbankinn and management in Husasmidjan could better have ensured that knowledge and information about the project reached the entire organization. In addition, Husasmidjan could have engaged an even larger coalition group to ensure more engagement.

#### 6.1.1. Limitations to Kotter's framework

The model aims to guide an organization throughout a fundamental change, in order to "cope with new, more challenging market environments" (Kotter 2007). In other words, the model is applicable in these situations, but not necessary applicable to all types of change. The framework highlights the importance of following the eight steps in a specific order. If one step is missed, the whole implementation will be affected, and there is no value in completing it. In real life, the steps can be both combined and tweaked. As we have seen in these cases, the four first steps where happening interchangeably, and we have identified these steps to be successful within both projects. Some steps are not relevant in certain aspects, change processes are complex and rarely a straight forwards processes. This entails that not all steps in the model are necessarily always relevant. For

example if a change process is supposed to be confidential, the firsts steps in the model will be irrelevant.

Dealing with difficulties during change management, such as resistors to the change process, is important. Kotter (2007) barely discusses how to handle possible resistors, and fails to provide enough information to help guide through these scenarios. Furthermore, and what we believe to be most important in regards to our research concerns the employees: The model fails to include individual differences, for example in regards to learning, knowledge transfer and cooperation between employees during a change process.

## 6.2. Sub question 2

### How have the different parties involved in the projects affected the knowledge sharing?

The consultant from Miracle had a lot of valuable knowledge from previous projects. Valuable knowledge about the project gives great prerequisites in order to have a successful knowledge sharing during an execution of a project (Bessant and Rush, 1995). The techniques the consultant has used for knowledge sharing, referring to the Kanban-simulation, gave the client hands-on knowledge, a learning method that was appreciated by the client. In accordance to theory by Bender and Fish (2000), we also argue that the consultant giving gradually more responsibility to the client contributed to providing the client with a sense of accomplishment, which is likely to create a positive attitude towards the project and the scrum method. According to theory and best practice, learning and teaching is important in all project phases: knowledge is created and knowledge can be lost along the way. Effective knowledge management therefore facilitates the creation and integration of knowledge, minimizes knowledge losses, and fills knowledge gaps throughout the duration of the project (Reich et al., 2008). From another view, from the very beginning the client has been welcoming towards the consultant. Low resistance towards the implementation of scrum reveals that the client has been willing to accept and absorb the knowledge from the consultant, which will again facilitate the knowledge transfer between the client and consultant.

We argue that there has been an effective knowledge sharing between Landsbankinn and Miracle while the consultant was still present, intentionally preparing the client to become independent for the aftermath of the project. However, shortly after the consultant left, the client made alterations to

the traditional scrum method, arguably because of inefficient knowledge sharing within the client company. The inefficient knowledge sharing within Landsbankinn has been identified to be a result of several things. Firstly, by stopping the use of the product owners. We have identified this to be a result of that possible product owner not have received enough information and training in scrum method, and therefore not understood the role of being a product owner. Even though the consultant is the one with most knowledge about scrum and potentially could trained others in the organization for the role as product owner; we believe that this knowledge transfer is a miscommunication, and underlying problems within Landsbankinn; likely to be a result of resistance from management and elsewhere in the organization.

Secondly, the knowledge transfer and training of the new team members have been impaired since the consultant left. This can also be explained by internal- organizing problems. We argue that neither of the original team members have been given the main responsibility of teaching the new members, and the training appears as unstructured and random in terms of which method that has been used, and whom that has conducted the training sessions. Furthermore, the consultant did not leave the client with anything tangible, something for the client to rely on for further development and learning. We argue that written manuals or handbooks in regards to how to conduct training sessions and knowledge about scrum would have been beneficial for the client. From our point of view, the consultant fails to leave the client in a favourable situation in order to get full utilization of the consultant's services in the aftermath of the execution. According to best practice effective knowledge transfer is in place when the consultancy company is able to leave the prospective client in a situation where the client is able to maintain and evolve its own information system, and thus leading to a better fit between the system and the client's processes (Davenport, 2000). Based on best practice and theory we argue that the knowledge sharing in this project has not been optimal. Inefficient knowledge sharing will not facilitate for the team in Landsbankinn to become independent in the aftermath of the project.

As regards the second case, qualified project leaders from both Annata and Husasmidjan, and experienced consultants from Annata have facilitated the knowledge sharing. Noteworthy, this case is characterized by many technical difficulties, which may have influenced the overall knowledge sharing in this project. We do however argue, that some of the technical difficulties can be explained by incomplete knowledge of the consultants from Annata. We believe that the newest

version of Microsoft AX 2012, which no one in Annata had implemented before, influenced the consultant's ability to transfer good quality knowledge to the key-users. Furthermore, we have identified reasons to why the project was delayed: external difficulties with the supplier (Microsoft), the failure of the ORS implementation, and misunderstandings between client and consultant in the diagnostic phase. All these delays resulted in that there was less time devoted to the training of the key-users as the go-live approached. Furthermore, the organization of the training appears to be unstructured and unorganized. Husasmidjan was of the opinion that Annata would provide and be responsible for the training. On the contrary, Annata argues that it was determined from the beginning of the project that this was something they would not provide. We argue that this miscommunication has resulted in a reduction in quality of the knowledge transfer in this project, which could have been avoided if there had been a mutual understanding of this from the very beginning.

As of today (May 2015), the project is still an on-going project, and consultants from Annata are still present in Husasmidjan's offices. The new ERP system is currently operable, and many employees are using the system. It is still possible to use the old system, which makes it possible to postpone the training. However, as of now, Husasmidjan does not get full utilization of the new ERP system. With regards to the knowledge transfer within Husasmidjan, the key-users have made short-videos that the employees can use in order to learn parts of the new system; we argue that this has been an efficient way to transfer knowledge in large and complex projects like this. During the autumn of 2015 the key-users will resume the training, and hopefully Husasmidjan will be able to facilitate better in order to make these training sessions more efficient than how it is today.

From our point of view, we argue that Husasmidjan has taken a lot of responsibility for the knowledge sharing in this project, compared to Annata. Annata therefore fails to take the role that helps bridging the knowledge gap between the client and the new IT-system (Bessant and Rush, 1995). This is likely to be a result of the delays in the project, which put the consultants under a lot of time-pressure. As we have discussed, this project has been very frustrating for the employees in Annata, which we believe have affected the quality in knowledge sharing because of impaired motivation. Husasmidjan will always be dependent on external technical support because they do not have the resources in-house. Our opinion is that this support-service will bring difficulties from Husasmidjan in the future, and is an issue that should have been dealt with in the initiation phase of

this project. This concern is also shared with the project leader from Annata. The support-service company that is going to assist Husasmidjan in the future, has less valuable insight about he client, as oppose to Annata. However, by taking a central role in the knowledge transfer during the project Husasmidjan have a greater chance of increasing their knowledge about the ERP system, and therefore move some of the knowledge in-house, which again will make them more independent. To ensure more efficient knowledge sharing within a large corporation, we do argue that Husasmidjan should have engaged more key-employees to contribute in the knowledge sharing (Sirkin et al. 2005).

In the end, these two projects have been very different in terms of knowledge sharing, mostly as a result of the different size and scope of the projects. However, common to both is that the client and the consultant have played an important role in order to contribute to knowledge transfer. According to theory (Wang et al., 2007), this facilitates effective knowledge transfer in an implementation process. However, the analysis from both cases has reinforced our impression that knowledge sharing within the client company is a central feature in order for the client to become independent from the consultant.

## 6.3. Sub question 3

### How can human aspects in the client-consultant relationship affect the success of the project?

The consultant from Miracle believes that in order to develop trust in the client-consultant relationship, both parties have to respect each other. In the Landsbankinn/Miracle case, we argue that some of this respect has been build as a result of specialized experience of the consultant, and strong reputation of the consultant company. Furthermore, the consultant was very devoted to this project throughout the duration, by using all his available resources and time. We argue that this dedication shows the client that the consultant truly wants them to succeed in this project. On the contrary, by welcoming the consultant and being positive towards this project, the client has also shown that they are dedicated to succeed in this project as well. We believe that this mutual dedication is likely to show that they respect each other. In addition, the personal characteristics of the consultant have contributed to creating an informal tone between the team members and the consultant. The informal communication style has also contributed to creating a personal

relationship between the consultant and each team member. Best practice by Schein (1978) suggests that a personal relationship is likely to create mutual trust.

We believe that this personal relationship created a solid foundation and facilitated towards the client to succeed in this project. A mutual trust reveals that each party want each other well. According to Argyris (1970), there is a general consensus that relationships between client and consultants are important in order to have a successful project. He underpins this by claiming that a consultant who is not trusted is unlikely to be given accurate, reliable or valid information to the client. The consultant from Miracle leaves the client hoping that they will be able to successfully continue using scrum. In other words, the relationship in this project the consultant tried to facilitate for the client to become independent of the consultant after the implementation.

Furthermore, we have identified that the client has had clear and high expectations to the consultant, and that the client believes that the consultant has fulfilled all the expectations to the client. However, the developed respect, trust and expectations are not transferred to the new employees within the team because there is no tie, connection or relationship between them and the consultant. This proves the importance of a good relationship between the client and consultant. Lower expectations of the new employees will affect their attitude towards scrum, which again affect their motivation towards knowledge sharing and continuing with the scrum approach.

Many of the differences in the second case study are related to the size of the project. The size of the project in Husasmidjan is likely to create more distance between the client and consultant, affecting the relationship between them. Multiple defeats and setbacks in regards to the IT-system during the project reduced the expectations and the trust of the client. As a consequence, we believe that the client's confidence in the consultants is reduced. Reduced confidence is likely to result in some negativity from the client towards the consultancy company, the new IT-system and the entire project, because of reduced trust in the relationship. Continuously, this negative attitude may influence how the employees in Husasmidjan will contribute in training and knowledge sharing within their company (Kotter, 2007). Since the project is still not finished, it is difficult to truly ascertain what will happen in the aftermath of this project. We do not have the ability to verify our beliefs or thoughts about the independency of Husasmidjan in the aftermath of the project. We do however know that Husasmidjan will always be dependent on technical support.

In sum, both cases illustrate that relationship-elements such as trust, expectations and respect are important factors to ensure success of the projects. The lack of these elements result in a suboptimal relationship between the client and consultant, because a suboptimal relationship will influence the success of the project (Argyris, 1970). We argue that these factors forms a foundation for how dependent the client becomes in the aftermath of a project. From our point of view, and based on what research has illustrated as worst-case examples, both relationships in these cases seems well established from the very beginning of the project. Based on the three relationship elements: trust, expectations and respect we find positive correlation between relationship and knowledge sharing. This gives pursuance in the pre-developed hypothesis concerning that the basis for good knowledge transfer occurs already in the initial phase of the project, when client and consultant establish a relationship.

## 7. CONCLUSION

To conclude this thesis, we will answer the research question, *Which aspects in the client-consultant relationship can shape how independent the client becomes from external consultants after the execution of an IT-project?* By drawing our conclusions from the sub questions and further reflection on relevant findings in relation to our research question. In the end of this thesis we introduce suggestions for further research.

Firstly, we want to address the quality in findings of this research. Examining very diverse project-cases and a small sampling size does not create a strong basis for generalizing our findings. However, our aim for this research is not to find a generalized solution for a good relationship or the perfect recipe for successful IT-implementations, but to draw insight into the client-consultant relationship. We do however believe that some our findings can portray accurate indications and tendencies in this relationship.

In regards to the relationship between a client and consultant we have identified that a relationship that contains mutual trust, where parties respect each other, and where the expectations towards each other are clear and achievable, forms a solid foundation for success in the change process. By drawing upon discoveries from applying change management theory for analysing the two projects, the importance of the last phases of the project has become clear. Inefficiencies in internalizing the system in this last phase of a project, may result in the client not achieving complete utilization of

the investment, thus the client does not receive maximum value of the use of external consultants. The client company's success of internalizing new routines and processes appears to influence the client's level of dependence after the completion of the project.

In addition, factors like motivation and engagement amongst all project participants are important in order to have a successful change process. A change process is a demanding and challenging period for the organization, and the management has to keep a positive tone throughout the project. Furthermore, an interesting discovery that was not anticipated prior to the research was that a large, complex and complicated project also affected the employees from the consultancy company. The consultants from Annata appeared to be stressed, tired, and eager to finish this project. During the last part of the project there had been frequent stagnations and difficulties, which consequently affected the consultants' attitude towards this project. This has been argued to negatively affect the consultants' motivation for contributing in knowledge sharing, reducing the quality of knowledge transfer towards the end of this project. Theory informs that the last phase of the project is crucial for knowledge sharing, and is where large amounts of learning takes place. When the consultant company's motivation for engaging in knowledge transfer towards the end of a project is reduced, this is likely to affect the prerequisite of the client to succeed in the future.

Other theories argue that efficient knowledge sharing is important in all project phases. Based on our research three things have been ascertained as important features in efficient knowledge transfer. Firstly, the cooperation between the client and consultant is important in knowledge transfer: Both the consultant's experience and ability to share knowledge with the client's by drawing upon prior experience, as well as the client's ability to absorb and assimilate the knowledge from the consultant is important. Secondly, it has been identified that the consultant needs to facilitate for potential changes and modifications within the client company at the conclusion of the project. The consultant should use prior experience to facilitate for possible changes in the future that will affect the client-organization, for example in regards to restructuring within the organization, or new technological developments. A strong facilitation will increase the client's independency from the consultant, because the client will be able to manage and control future events. Lastly, knowledge sharing within the client company is central in order for the client to become independent and to get full utilization of the new implementation. The client's ability to continue learning and sharing knowledge in the aftermath is decisive in regards to how well the

client is able to utilize the new system. To accomplish efficient and high quality knowledge sharing within the client organization, we find engagement, motivation and cooperation between employees to be crucial ingredients. We have identified the importance of the role of management to ensure that all employees need to feel valuable, and that their work is contributing to the success for the company. Management plays a central role ensuring that employees feel appreciated. How well the client is able to ensure great knowledge sharing among the employees influences how dependent the client becomes from external consultants in the aftermath of the project.

#### 7.1. Further research

As we have ascertained above, the dependency of the client is determined based on the client's ability to facilitate knowledge transfer in aftermath of the project. Considerable research has been conducted investigating the role of the consultant when working with clients, and how the consultant's knowledge can affect the success of the project. Furthermore, the ability of the client to absorb the knowledge from the consultants has been highlighted in literature. In addition, research draws attention to how dependent the client has become on external consultants because of reduced in-house resources in regards to capacity, human resources and technological knowledge.

We do however argue that literature fails to include how consultants leave the client in a favourable condition, being able to continue to get full utilization of the service implemented by the consultants, on their own. Even though the results from this thesis are varying, and it is difficult to ascertain any generalizing conclusions about the client-consultant relationship and the client's independency in the aftermath of the project, we truly believe that this subject should be focused on in academic research. Information systems are continuing to be an increasingly important component in a company's overall business strategy and the IT-related developments represent a growing proportion of investment for many organizations. We therefore believe that focusing on projects after their completion, trying to develop a best practice for how clients and the consultants can ensure efficient knowledge sharing in the aftermath of project, so that the client continues to get full utilization of the implementation, and therefore becoming independent of external knowledge, should receive more attention in academic research.

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# Appendix 1 - interview guide: Preliminary phase

Research objective	Topics	Questions
"Facesheet"	Informal background information	What is your current position?
		Do you have any prior work-related experience?
		What is your educational background?
		What was your role during this project?
The project	The initial phase	What was your role during this project?
		Can you elaborate on the information system?
		Can you tell us about the contract, and initial offer?
		Who contacted who?
		Have you had this role before?
		Why do you think that Annata and Husasmidjan should have worked together?
		What is important to consider in this initial phase?
		In you perception what did the client want to accomplish?

# Appendix 2- interview guide: Client company

# **Interview Guide: Client Company:**

Research objective	Topics	Questions
P ii	Personal background	Can you briefly explain your role/position in the company
	information	How long have you been working here for?
		What is your educational background?
		Do you have any prior work-related experience?
	Information about the project	Can you briefly tell us about the project?
		What was your role during the project?
		<ul> <li>In total, how many where involved in this project?</li> <li>How many where engaged from your company?</li> <li>How were these people engaged?</li> </ul>
		Can you tell us about the timeline and budget of this project?  • Was the project finished as initially planned?
	The initiation of the	Who initiated the process?
	project	<ul> <li>Do you know why this project was initiated?</li> <li>Do/did you agree upon the need for a change?</li> <li>Was this a common perception within your organization?</li> </ul>
		Where there any resistors to this change?  • How did you overcome resistance to change
		How did your company prepare for the change?
The change process		<ul> <li>Was there established a project-committee?</li> <li>If yes, can you elaborate more on this committee (Number of involved, responsibilities and roles</li> </ul>
		What were your responsibilities and role in the initiation phase?  • Have your responsibilities changed? If yes, how?
		<ul><li>How where you informed about this project?</li><li>From whom where you informed about the project?</li></ul>
		<ul> <li>Can you tell us about how your company started the preparatory work before the project started?</li> </ul>
	The entire change	Can you tell us about the time-line of the project?
process	process	Can you explain in broad terms what happened at differentimes of the project?
		Were there any reviews/updates/status checks in regards to the progress of the project?  • How often did they happen?  • Who participated?  • Were there any short-term wins?
		Were there any delays in the in process?  • If yes, why?
		Were there any other obstacles during the project?

		If yes, what?
	Management	Has management been positive towards the project during its entire duration?  • Has the management had clear goals?
		How did management/project leaders communicate the goals to the employees?
Relationship	Prior ties/relationship	Has your company used this consultancy-company before? If so were the same consultants involved in this project?
		Do you feel the consultants gained a thorough understanding of your organization?
	Expectations	Before you contacted the consultants, did you and your company have a clear opinion about what type of IT-system you wanted?
		When you contacted the consultants were you able to identify where your company had room for improvements, or is this something the consultants did for you? Or: Did your organization prior to contacting the consultants already know what IT-system you wanted, therefore only in the market for a second opinion?
		Do you feel that the new information system has met the expectations?
		Do you believe that the consultants truly understood the underlying reason behind implementing and performing the IT-project?
Knowledge sharing	Communication	Can you tell us about how you have been communicating with the consultants?  • Formal/informal communication
		What channels (methods) were used for communication?
		Did you experience any problems understanding/communicating with the consultant?
		If you had any questions in regards to the new information system, how and where did you get your answers?
		Do you feel that the consultant shared all their knowledge with you?
	Availability	<ul> <li>Where the consultants present?</li> <li>If yes, how often?</li> <li>How were the consultants present, did they observe? Conduct interviews? Have their own work-space?</li> </ul>
	Training	Has there been any training activity in regards to learning the new system?  • If yes, can you tell us about this?  • Were the consultants involved in this training?
		Who has been responsible for the training of the employees?
Current status	Client satisfaction	How did the project end?
		Do you feel comfortable about the new information system?  • Do you feel that you get full utilization from it?

Are you experiencing any problems with the new information system?

• If yes, how do you handle them?

• If not, are you aware of anyone that has experienced any problems?

Do you feel that everyone understand the new system?

• Do you feel obligated/motivated to help others understand?

Have you experienced any issues since the consultants finished the project? If yes, how have the company handled that? Have the consultants followed up on those problems?

• Monitoring
• Support-service
• Are you satisfied with the new information system? Is it

Would you consider using the same consultancy company

anything like what you expected?

Do you think that you will be able to operate the system on your own, or will you always be dependent on assistance?

In your opinion, has the system been successfully implemented so far?

Why/why not?

for another project in the future?

## Appendix 3- interview guide: Consultant Company

#### **Interview Guide: Consultant Company:** Research objective Questions **Topics** Personal background Can you briefly explain your role/position in the company? information How long have you been working here for? What is your educational background? Do you have any prior work-related experience? Information about the Can you briefly tell us about the project? project What was your role during the project? "Facesheet" In total, how many where involved in this project? How many where engaged from your company? How were these people engaged? Can you tell us about the timeline and budget of this project? Was the project finished as initially planned? The initiation of the Who initiated the process? The change process project Do you know why the client initiated this project? Do/did you agree upon the need for a change? Where there any other competitors to this project?

		<ul> <li>What do you think is the reason for the client choosing you for this project?</li> </ul>
		Can you tell us about the initiation phase of this project?  • The diagnostic phase, tender offer, contract
		Was there established a project-committee?  • If yes, can you elaborate more on this committee?  (Number of involved, responsibilities and roles)
		What were your responsibilities and role in the initiation phase?  • Have your responsibilities changed? If yes, how?
		Can you tell us about how your company started the preparatory work before the project started?
		Can you inform us about the system that has been implemented in this project?
	The entire change	Can you tell us about the time-line of this project?
	process	Can you explain in broad terms what happened at different times of the project?
		Were there any reviews/updates/status checks in regards to the progress of the project?
		Were there any delays in the in process?  • If yes, why?
		<ul><li>Were there any other obstacles during the project?</li><li>If yes, what?</li></ul>
		How did the project end?
Relationship	Prior ties/relationship	<ul><li>Has your company assisted this client company before?</li><li>If so were the same consultants involved in this project?</li></ul>
		What did you do in order to understand the client-organization?
	Expectations	<ul> <li>Where the client company able to identify in what way they needed assistance?</li> <li>Did you see any room for improvements, or where the client able to identify this themselves?</li> <li>Did you identify inefficiencies in the client company?</li> </ul>
		Do you think that this project has met every expectations of the client?
Knowledge sharing	Communication	Can you tell us about how you have been communicating with the client?  • Formal/informal communication
		What channels (methods) were used for communication?
		Did you experience any problems understanding/communicating with the client?
		If the client experienced any difficulties with the new system, how would they seek assistance?
		Do you feel that you, and your company, shared all your
		knowledge with the client?

		Conduct interviews? Have your own work-space?
	Training	Has there been any training activity in regards to learning the new system?  If yes, can you tell us about this?  Were you or your company involved in this training?
		Who has been responsible for the training of the employees?
	Motivation	Has the execution of this project influenced your daily tasks?/Has the project demanded extra resources (for example, in the form of longer work days) than the normal business day prior to this project?
Current status	Client satisfaction	How do you think it has been for the client since the project finished?  • Have you been in touch with the client since the project where over?  • Do you offer any support-service?
		Have you appreciated working with the client? Would you prefer working with them again?
		Do you think that the client will be able to operate the system on their own, or will they always be dependent on assistance?
		In your opinion, has the system been successfully implemented so far?  • Why/why not?

## Appendix 4- Transcriptions: Middleman (05.05.15)

Interview with the middleman in Husasmidjan/Annata case. This interview was conducted in Danish.

Så lenge vi har forstått det så er du en slags mellom Husasmidjan og Annata?

Ja. Har dere snakket med project lederen hos Husasmidjan?

Vi skal snakke med dem i morgen

Det var to år siden jeg var I Husasmidjan. Annata er et lite men spesialisert konsulent selskap. De er spesialister på ERP systemer, store komplekse IT-systemer. Jeg har vært konsulent hele mitt liv, så jeg var I PWC I ti år så var jeg SAS Institute I fem år, jeg har trivdes I den konsulent rolle.

Fra 2011-2014 så har jeg jobbet I et lite konsulent selskap på Island som fokuserer på komplekse løsninger

Hva har vært din rolle i forholdet mellom Husasmidjan og Annata?

Det var at jeg hjalp til med å velge en leverandør. Husa hadde valgt systemet, AX 2012, så det lå fant, men de hadde ikke valg leverandør, en implementerings partner. Min rolle var å ta den gjennom en prosess der vi gikk forskjellige kriterier. Så de skulle stille opp en demo/anbuds tjeneste.

(The interviewee talks about himself)

Jeg har erfart at man kommer inn hos kunden i en liten periode og skal hjelpe kunden med å implementere et system. Jeg kan ikke noe særlig om komplekse IT-systemer, så det med å strukturere (kravspesifikasjon) se ut. Hvordan skal man legge det frem til et anbud. Hvordan skal man vurdere det leverandører sier, det er vanskelig for klienten å oppfatte.

Så det var denne prosessen du var i?

Ja. Grunnen er fordi jeg kan språket. En annen ting er at Husasmidjan eies av Bygma i Danmark og Bygma ville ha i gang denne prosessen. På lille Island så har man en IT-pusher, en leverandør å handle med. Så har du operatører. Det er meget konkurranses på Island fordi det er så lite, og dette var Danmark interessert i å utnytte for å få det beste tilbudet. Men det gir flere muligheter for å by, så har innflytelse på prisen. Det er flere omkostninger, som for eksempel lisens fra leverandør. Leverandørene har mange forskjellige avtaler i forhold til lisens hos for eksempel Microsoft.

Så har du selve implementering-prosessen/konsulent-rollen, de skal levere til kunden. I den prosessen er det mer å føre dem gjennom en prosess hvor de kan få kravspesifiseringen sin. Kravspesifikasjonen den viktigste delen i prosessen. For da får man dannet seg et bilde av hvordan prosjektet ser ut. Sånn gjør vi det i dag, sånn vil vi ha det i fremtiden. Etter dette kommer kontraktsforhandlings prosessen, hvor man spesifiserer hva man skal levere, hvilke krav kan jeg som leverandør levere til kunden, hva kan kunden levere til leverandør , hvem har ansvar for hva.

Jeg har jobbet mange år i Danmark, og noe annet som er spesielt her på Island: Bedrifter i Danmark har ofte kontrakter, standard kontrakter på implementering av ERP som de bruker i prosjekter. Dette blir brukt mye av dette i praksis. På Island er det annerledes, her bruker man ofte leverandørenes kontrakt. Og det er jo deres kontrakt, og der står det en del om hvordan de vil at ting skal se ut. Ikke nødvendigvis klient. Vi har en standards kontrakt som vi gir til virksomheten. Også kan det gjøres noen modifikasjoner til den. Dette var en tung prosjekt i dette prosjektet. Annata var ikke vant til så komplekse kontrakter. Hva skjer hvis leverandøren ikke leverer, masse scenarioer, hvordan skal ting faktureres? Det var mange ting som skulle på plass. Det er også en governance på prosess, hvis kravspesifikasjonen er god nok hvis man skal begynne å endre på Target Price og kontrakten. Hvis det ikke skjer og det er leverandørens feil, som for eksempel at du bruker for mange timer så har du ikke krav på timebetalingen. Hvis det går så så mange timer over så går bedriften 60% rabatt. En motivasjon/incentiver for at leverandøren skal klare dette. Denne governance prosessen må være spesifisert i kontrakten. Etter dette står du med en kontrakt om hva du skal gjøre, hva du skal få, en pris, en forståelse for dine behov. Hva kan du forvente å få ut av dette systemet?

(The interviewee gives information about ERP systems and how the contract should be designed)

Du får et system men du får også masse utfordringer med dette. Noen gang overselger leverandøren systemet, men det gjelder å holde forventningene nede. Forventningsstyring er også en del av denne prosessen.

Er det noe metoder for forventningsstyring?

Det er noe som kommer naturlig i prosessen. Det gjelder både konsulent og klient. Det er ofte svikt i kravspesifikasjonen og kontrakten. Kontrakten er bloodprint på hvordan prosessen skal se ut, og små endringer blir tydeligere på grunn av kontrakten. Kjemien mellom bedrift og leverandør er viktig. De må finne ut hvordan de vil at ting skal fungere sammen, kommunikasjon er derfor viktig.

Dette er kjernen av vår oppgave. At forventninger og tillit mellom klient og konsulent allerede skapes i begynnelsen av prosjektet, under the initation phase.

Absolutt. Det er helt riktig. ERP og BI er de systemene jeg har arbeidet med, for meg så er det en gjensidig forståelse om hva man skal levere som er viktig. At begge forstår hva man skal få til. Kontrakten har arbeidet seg gjennom denne, og denne danner egentlig det formelle grunnlaget. Men så er det hvordan du utøver dette. Man må respektere hverandre. Kultur er også sinnsykt viktig. Islendere har en annen kultur enn dansker. De er mye mer risikovillig. Kontraktsignering er derfor påvirket dette.

(The interviewee tries to illustrate the differences between cultures in Iceland drawing upon a story from the Norwegian Vikings)

(He also believes that it can be seen in terms of culture, and characteristics of the countries.)

(Then the interviewee tells about agile implementation methods. He then talks about differences between contract-signing between ERP-systems and Business Intelligence. In sum, in business intelligence projects is more difficult to draw concrete requirements and timeline and budget upfront, while and ERP-system will have a more detailed set of requirements and a agreed upon time and budget)

(The interviewee talks about of the ERP system works and related integration problems. For example in regards to HR, Warehouses, and Accounting)

Alle er enige om hva man skal gjøre i starten av prosjektet. Tilbake til forventninger. Jo mer realistiske de er jo bedre er det. De verste prosjekter jeg har vært med på. Det er to typer prosjekter. Det ene er hvis forventingene ikke stemmer, hvis kunden tror de får mer enn hva man har lovet. Hvis du har en salgsdel i selskapet blir det ofte sånn fordi de ikke skjønner at det ikke går an å levere. Den andre typer prosjekter er ting man ikke ser som konsulent. Som for eksempel at man skulle implementering ERP hvor mennesker fra bedriften ikke kunne snakke sammen. Prosjekt-lederne hos klienten kunne ikke snakke sammen. Det viste seg at det var noe personlig forhistorie mellom dem, som jeg ikke fikk vite om før etter at prosjektet var over.

Hvor mye tid bruker man på å godt kjent med bedriften? hvor viktig er det?

Det er kjempe viktig. Desto mer du klarer å skjønne jo bedre er det. Desto bedre konsulent verktøy du har på forhånd jo enklere er det å sette deg inn i klienten. Desto flere prosjekter du har hatt på forhånd jo enklere klarer du å identifisere forskjellige ting. Erfaring har en del å si. Du kan komme langt med verktøyene, selv om du har lite erfaring. Det er vanskelig å gjennomskue ting hos klienten. Alle de tingene man ikke kan bruke med verktøyene er alltid vanskelig. Unge konsulenter fra McKinsey og Accenture har sinnsykt gode verktøy, men de gir ingen innsyn i det.

Opplever man ofte at det er user-resistance? Når man kommer inn med flotte verktøy og skal redde dagen?

Det er veldig forskjellig. Det er forventnings-avstemming igjen. Du må levere til forventningene. Inkluder dem (klienten) helt fra starten av prosjektene.

Er dette konsulentens jobb? Å få medarbeiderne med?

Det er konsulentens rolle. Dette er viktig. Det er sånn det skal gjøres. Det er også ledelsens rolle og si til medarbeiderne at sånn er det. Men, det er ikke alltid like lett på grunn av størrelsen på prosjekter. Vi kan ikke kalle inn alle medarbeiderne. Derfor velger vi oss noen super-users, noen med makt i organisasjonen. Så gir dette en uformell makt. Dette er utrolig viktig. Ledelsen må bistå. Men det er ofte ta ledelsen ikke vet mye, de har sjelden forutsetning for å si noe om IT-prosjekter. Dette er sånn typisk i forhold til change management. Management er for gamle for eksempel er en typisk greie. De skal ikke sitte så lenge.

Er det ofte at konsulenten kommer inn i bedrifter, også snakker de om IT-systemer, også skjønner ikke ansatte hva de snakker om fordi folk egentlig ikke forstår IT?

Ja, det er det. ofte er når man kommer inn og skal lage et prosjekt så har virksomheten hatt noen leverandører og sett på noen hjemmesider og Power Point. Noen av dem vil ha noe kunnskap. Men hva de egentlig får det skjønner de ikke noen ganger.

(The interviewee draws an example from a previous case to illustrate)

(The interviewee tells about differences between Oracle, SAP and Microsoft)

## Appendix 5- Transcriptions: Consultant Miracle (05.05.15)

Background information

Go on my LinkedIn profile.

Have you worked with Landsbankinn before?

No.

Have Miracle worked with Landsbankinn before?

When I came to Landsbankinn there were 3 miracle consultants working there at full-time. There is a very good relationship between Landsbankinn and Miracle. Its been for many years. People know each other from other relationships.

Have you worked on similar projects?

Yes, at the competitors Islandsbanki. I wanted to implement my ways of working. I used consultants when I worked there, but they were useless so I did not wanted to be that guy at Landsbankinn.

This experience must have been great for this project?

Yes.

Miracle is a small consultant company founded 11-12 years ago. Very respected in Iceland, very broad concept. We focus on banks, we work for all the banks in Iceland. Also airlines and insurance. And then we do most of things that come along our way, in different sizes. We do both long-term contract and short-term contract projects.

In the banks we can have contracts that last for 5 years, full stop full time. And then other time we can get a daily project.

In other words our focus in pretty wide. We are famous for database solutions, project consulting, and like business intelligence (BI). BI is where we actually is growing. System offering, system management. We have systems that we use to manage all the company's. and the security. For example PCI. Do you know what that is? Payment card industry. There are much rules and regulations.

We want to analyse your relationship between you and Landsbankinn, so we have some questions regarding communication, motivation, trust, change management, knowledge transfer. We also want to uncover and look at how the dependence between the client and consultant in the last phase of the project. We were wondering if you could tell us about the project. What was your role? What did you do? What did you implement?

The project actually evolved. Initially I was hired to make sure that knowledge from three employees that had resigned would be transferred and kept within the company after they quit. I needed to documents their knowledge. These key people in a small team, in a data-warehouse team. Only 6-7 people. Their knowledge was important. My job was to identify what the team members are doing, their projects, how is it going, where are they heading, what are the deadlines, what are the customers. I came in every morning, to watch the daily standards that the bank had. Do you know Agile methods? Like Scrum, Kanban, Lean.

We only know that it is a process/method and often related to project management

Ok. The idea is that you start every morning, every day, by asking three questions:

- 1) What did you do yesterday?
- 2) What are you doing today?
- 3) Are there anything preventing you from doing your job?

Answering these three questions goes really quickly.

So you came into their office asking these three questions every day?

Actually, these questions are always there, the employees will always have them in their mind. The programmers and team members are suppose to know these questions and just answer this to the team leader. I came in every morning, to understand what was going on, I started to observe this morning ritual. Reviewing projects, and I saw that nothing was really happening. Everything was going really slow. They had a white-board with projects on. They had so many projects that they actually had two white-boards. A new project came up; they just accepted it and started doing it.

Was this method only used for the three who was going to resign?

No, the whole team was going to use it. Communication was really difficult, because the team leader of this little team was Chinese. And spoke no Icelandic. People had some issues with the manager. I do not know why, but sometimes they spoke Icelandic on purpose so that she could not understand anything. She was trying to sending emails, using Google translate to Translate Iceland to English. I tried just to see what the quality of the translation was like, and it was really poor.

What happened is that I started sticking my nose into these things. I saw that the project management in the bank was very bad, and I told them that I could help fixed it. I have experience within IT, and banking. They were actually interested.

And you worked alone on this project?

Yes. It was another consultant who worked with me, but he worked with the other three guys that were to resigned.

So I started telling them how I would accept project, how I would define projects, how I would prioritize them, how I would assign people to them, how I would try to create expectations by setting deadlines. If there were too many projects, I told them that you have to tell the client, this has to be postponed, this has to be cancelled. We had to do this in order to meet customer expectations. And this worked pretty well. We started working with this method, and the word got around. This resulted in that another team (BI-team) at Landsbankinn were interested. The team was at the same size. The team leader is head of that. So I sat down with them and introduced Scrum and Kanban.

So Scrum was the method you used to help them organize their work?

Very briefly Scrum is about: taking your project, maybe 6 months, very big- break it into chucks, which are called sprints, and they are maybe 1 or 2 or 3 weeks.

It was very difficult to get this people that was used to very long projects saying "yes, this will take me 6 months". No one really gets anything promised/results in 6 months. And in the end, nothing was really. No product in the end. Everything was always delayed.

So, this turned out to be maybe 6-7 months project. It started in June 2013, and I left February 2014. So now it has been just over a year since I left. I would be very interested what the team leader has to say about it. Six months ago we had a cup of coffee, and I think that things have faded out. Not as structured and rigid as when I was there. This ties back to what you said before, about companies being dependent on an external consultant. When you make changes like this, you are actually changing the way people work. So two things are absolutely necessary: One is discipline, you have to follow process, trust the process and you can only do this if you understand the process. Second, you have to have courage. There will be many situations, employees want results now, and they want in yesterday. If you tell them to slow down production a little bit to make it better, in a month it is going to be better. Employees usually do not have the patience for this. That's why you have the discipline, you need to trust the process, and follow the process. The team leader was successful, because she

had the courage. It is interesting about the contrast between the two departments. The team leader was very good with communication, people skills.

#### (Olaf comes in)

Contrasting between the two departments: You have one manager who has great people skills, well with communications, she actually played on a national basketball team so she is good at teamwork. On the other side you have some from another culture, does not speak the language, does not have the respect of the team and struggles both downwards and upwards. This actually affected the outcome of the projects. Because I was doing the same thing for both of them, but Team 2 was much more successful.

Basically, that was the project. Implementing new ways of accepting project, defining them and delivering stuff into production. Basically, what we did, Kanban and Scrum. Since we define the sprints, two weeks of work, they actually set 4 weeks in the other team. In the end we saw the light.

What you do is that you have, a list of requirements from the clients, so if you want your system built, I will help you to find the tasks. And we will put them all over the table, and you will prioritize. Then I will tell you how long time you will use on each, and then you can re-prioritize. This might be the most important thing to do. Because if one project takes 5 weeks, you might have to do some other project.

Who is included in this process?

You have three roles in Scrum:

- 1) The project owner. A single person that acts on behalf on business. This person comes to the meeting. He represents many other people. To keep it simple.
- 2) Scrum master: the one that manages the structure of the team. Who is doing what and when is he doing it. And how are we doing? Are we making progress?
- 3) Team-members

These three people are in the meeting. I took the role as a scrum-master, with the team leader. We shared the responsibilities. It is very simple techniques with the three questions. Once you have done what I have described, when the project owner has identified what to do, when to do, and with different prioritizes. You put it up on a whiteboard, and you start working. And you have to find deliverables and you will give, in the end of the sprint in two weeks. So, you will at least give something (every second week).

When I worked at the bank, I would give both teams a whole day where I would give lectures in these methods. Kanban simulation to show what would happen if you let too much work get into the system. The idea is that I give you just a little bit of what you want now, and you can start using it to get value, and in the next sprint in two weeks, you will get value from the last and new. Instead of giving you everything (value) in 6 months. Small wins along the way. If you study these methods, you will find tons of literature. This is really getting/catching on within IT. Sprint can be even one day in some cases.

What happens if you don't manage to achieve your goals? And the time is over.

Lets see if you have one week sprint. Some of the meetings are mandatory, and you can change everything you want. On Monday morning, we have a plan meeting, with the project owner and the scrum-master and the team come together. They prioritize they estimate and they fill out the manifest for that week. We are going to deliver this in the end of the week. Every morning they have this 15min. Meetings what did you do today. On Wednesday afternoon, you usually have a meeting called story time, because these tasks that you have written on index cards are called stories. These stories should describe what you want to do, no long stories, no technical terms. Just 10 words describing what you want to accomplish in your role.

So, in the story times on Wednesdays we re-arrange the stories and you re-estimate them. Especially the stories for the next week, because you might have found out that I have done this, and I might not have to that because the tasks overlap or compliment each other. So, on Friday afternoon you have 2 meeting, one sprint review where the team and the project owner and everyone else who is interested in the project is allowed to attend. It is like show/tell at school. We did this. You also told them that we did not do that, but we did this during the week. The stories that did not get finished are not discussed.

We did this and it worked like this... Actually show what you have learned/done. When this is done, you have a retrospective meeting within the team. The team talks about what did you do well and what did not work that well. Usually we have one, two or three things that we want to improve next time. For example, in the morning meeting is suppose to be from 9-9.15 and everyone shows up 5 minutes too late. We tell that everyone should be there precise at 9. One method that I have used and is popular in Scrum method is to use a fake microphone. You want to tell what you did yesterday and what you are going to do today and if anything is stopping you to do that. And to prevent people from spin of discussions and talk in each other mouths. If you have the microphone, you are the only one that is allowed to talk. This makes the meeting goes very efficient. Meetings only last for 15 minutes, as they are supposed to.

So, what happens with the stories that we did not finish? They get back in the table.

The project owner decides what happens with this. It might not be that relevant anymore. Or the other way around. You realize everything and prioritize again. You never change the sprint. Sometimes you can abandon the sprint, if everything has gone south. You never change the sprint. The change that is allowed is if the two of you work together, and you have 3 hours available each, and you taking work for 80 hours. If you see that you are going to finish way early, then you can go to the scrum master and ask for more work. Or you can inform them we are not going to be able to do this, so its not going to be done. These kinds of changes can happen. You cannot bring in new stories just because you want to.

So, what happened with these two teams? I started implementing these changes. Started organizing the whiteboards, I started putting in place.

It is very important to not overwork your system, like for example your IT-team members. If you think about your capacity who can only work approx. at 40 hours a week. This is your capacity. If you over push this, your employees will be tired, and they will not be able to deliver. The example with the pipe.

That was what happened in this team, the team members only accepted too much work. And had troubles to finish everything. Then there will be problems with the IT department and the rest of the organization. Because the internal customers will be irritated that the IT-department don't finish their requests. They are always late, I never get what I want, they downgrade me.

So we wanted to change this. The data-warehouse team, manager XX, they adopted 4 weeks sprints. And the team leader and her team adopted 2 weeks sprint. This took a few iterations; we draw a whiteboard this way, looked a little better. So when we started worked on the progress limits in place, what we saw happen is that all of a sudden we did not need two whiteboards. Because we accepted less work. All the stories/tickets that we did not use ended up in a queue. That was the first win for us. I also implemented a limit on how many projects each person could work on. You know some people think that they can multitask and do several things at the same time. This is not happening. You will have a disaster somewhere in the project. So, my idea was that we should have a picture each of the team-members, you are working for IT, so when a project I stuck a picture to the project. You are working on this and you are working on this. When a project needed more resources they just printed a new pictures (old method). And you can see what happened. It is just pictures on the wall it is not doing anything. This resulted in too many project per person. So I sat a limit, you can have two projects each. With a green frame. People can do two things at the same time within the same team.

Two green heads, and when they are done. You cannot accept any more work. Sometimes, special skills are required, so allowed them to create one head with a red frame on it. This was the priority head. Is says that this guy is overloaded. The read head you have to finish this before you finish anything else. You cannot say that this is a priority and not work on it. So this was to make sure that people do not accept too many pieces of work. What happened with this? Because you always were working on 2 maybe 3 projects was able to keep track of each others work. Not German-style, but I see that you have been working on this ticket for many days, do you need any help? People were able to identify their team members, and keep time of progress. So, things was progressing ok within the data-warehouse team, slower, but the really interesting was in the BI team.

Were you working on the same team at the same time?

It was able to do so serial. I was running between the two teams. I was able to attend all meetings. Anyhow, at team 2, after the first sprint, after 2 weeks of work, they delivered something. This had not happen before. This was so new and unbelievable that many people for this sprint review in the end of the sprint period, and just could not believe it. They actually started celebrated this with a party. All were happy, the team were happy and the whole organization was happy. This started creating trust between the BI team and the rest of the organization. Because the team leader was able to say that she and her department will be finished with the customers project in 2 weeks, and it actually happens. Instead of earlier when she said that she would be done in 6 months, and nothing happened along the way. (The pipe-comparison)

So we continued this, we re-defined the process. I let go a little bit, and the team leader took more and more control. And the process started going naturally. When I left the process was automatically in February.

What have they done since? I think that they have lost a little bit of discipline, not the courage because the team leader says what she wants. She will talk to top management. This is unique in a bank, where everyone is trying

to achieve a better position. She is actually stuck in the same position, maybe because she tells people what she things. Or maybe she is just good in this position. The team is still doing very well.

I have met them every 6 months since, and they seem really happy. The other team. They did some progress. Make some progress. But people are still unhappy. There are actually some people who have left the data-warehouse team. And now are at BI. Because they wanted to be at the BI team because they had more progress/results. This was a really bad situation. That story ended when XX quit. By mutual consent. She was transferred from IT to Chief architect role, and then she decided to move back to China.

Was this after the project?

Yes, this was September 2014. When she actually left the bank. She was parked to the side.

Wanted to take these ideas and implement them elsewhere, but you have resistance.

How did you notice any resistance?

Some people at the bank would not talk to me. When I described my idea they where not polite to me.

Why do you think they did that?

They might not believe in the idea, maybe because they do not understand it or if they think that they have a better idea themselves. For them it can be that just another consultant is coming in his fancy suits trying to sell more hours to bill. He leaves, and everything is forgotten.

This might tie back to what you said before about the newspaper in Norway that company's becomes dependent on the IT-consultant. There might be many reasons for this. It might be because the IT-consultant is holding something back, not transferring his knowledge to the team. It might also be that no one sit down to understand the process. They made some good efforts at the bank, but I think the vandalise attitude was adopted by anyone. I really believe in this method, I have seen it work many times. But when I left. It is like the priest leaving the church.

And in the case with XX, the fact that her employees did not talk to her in English only in Icelandic, do you think that was a way of showing resistance to her? And also towards the project?

I think it was personal with XX.

Was it more resistance on that department? Was it more difficult to work with the people in XX department?

No. It started openly. The first meeting I had one of the team-members came in to my face and told me that we really do not know why you are here. He almost told it as directly as that. When I let them talk, and explain. It took like 3-4 days before they started becoming more friendly. There was still resistance and negativity towards XX and they would talk, less than respectfully to her. If you put in the gender-context, you have a foreigner, a women, who is better educated, she is small, she does not speak the language. You have all this things working against her. There was this one guy who had been the manager, he was demoted for her to be manager. So you can mange the tension. This guy, it only takes one rotten apple to influence the whole group. I think if the team

leader had been a tall blonde Norwegian guy things could have been different. I really think that the success of this project would have been different. So, you know the famous glass-roof? I think I saw every bit of it.

Do you think this is something special in IT-environments?

No, I don't think so.

When you come to Landsbankinn did they know that they had problem? They just used you to define it, or did you do some problem identification?

I think that they realized that they had a problem, but I think that their idea that "this is the way it is" you cant really change it. This is because they lacked courage and discipline to say no to projects. Some people come from the business and tell them that you have to do this project, and then they think that they cannot say no. They get overworked, frustrated, bad quality, you dislike the company. All this reduce moral, reduce the work ethics. The output of the people.

One of the things that I wanted both the team leader and XX to tell management was that you are not able to do anything at the same time. It might be a hurtle of the Iron triangle. We have a budget for it, and you wanted a certain date, which is the deadline. And you want certain features, that the quality. So, when some of these three things, budget, the deadline, the quality, defines your project. If this scope is too big, you cannot fit more in, without changing one of these corners. Can I do it in one week instead of two weeks? No, that will change the quality. If you cannot add something, without influencing other things. When she drew this, on a whiteboards for BOD meeting, I think that was a moment for her, where she got her boss to understand this process.

Do you helped them identify what was the problem?

Yes. I told them that you are doing too much. What you are actually doing with this heads on the tickets, is just a staff-inflation. Its like printing more money. It does not doing any good. No more work gets done only by printing more heads. So I told them that you had to reduce your work-load. They had to overcome, the fear of saying no to the business. It is always the IT versus the business. And the business, the rest of the company, always views IT as the aliens. IT-looks at the business and hoping that the aliens. There is a huge gap between them. When you don't define projects, what should be done? What is the priority? How quickly can they deliver these things? We will have a big mismatch in the capacity to deliver, and the expectations to each other. And this gap, when you can bridge this you will succeed.

Why where you hired? Why you? Why Miracle?

XXs husband used to be in her job. He left and started working at Miracle. It was very close. And this is of course a characteristic of Island. We are so small. We are like Bergen. You know people. XX actually went through the formal way. She asked Miracle to help her with this knowledge transfer. I know that you have prior experience with this, and a really good reputation about this. And I need someone to come and help. We went through all the formal motions, and she really wanted someone from this company.

Since there is a prior relationship, do you feel that you gave a little extra, worked a little harder?

No, I actually told XXs husband that I will change some of your processes. You are not doing this job anymore. If I had different ideas, I would try to implement them. I saw it as a regular client, a really exciting project and I wanted to be good and deliver something.

When you went to Landsbankinn, how did you analyse? Did you observe the team members? In the initial phase, what is the first thing you do when you come to a client?

The first thing, was this difficult meeting I told you about, XX introduced me and told everyone that he is going to help us transfer the knowledge from the three team-members and it is going to be difficult, because it is only going to be four people left with the job load of 7 people. We are still trying to hire, but have not succeed/hired yet. I had already started, trying to make a list about all the projects that were going on. We started worrying on that list. As I sat down with them, 8 hours a day, I started picking up things that we did not see on the list, and I added them. Also, things that I did not understand, I could ask them. And slowly, but surely I started building up and understandable of what projects that were going on, what were big ones, small ones, important ones, and urgent ones. So it was, I think the term is total emergence.

How long was this first phase?

A couple of weeks. 2-4 weeks. Just to get to know all the processes. They have a realize cycle: They do programming for few weeks, testing for few weeks, and then the release. This took them 4 weeks. So this is their work cycle. So I anted to see a full circle of this actives.

Did you interview some of the employees?

Not formally, but I sat with them and joined them for a cup of coffee?

Did you observe the way they worked? (Methods)

I looked at them as my own company. I was a team-member in that period. I was not thinking about making Miracle more successful. That will be a bi-product of succeeding at Landsbankinn. I was given a e-mail address at Landsbankinn (intranet)

I also received an email about social happenings on this email. I did not attend, but I got the feeling about the culture. I have worked at Islandsbanki before so I have experience working with a bank. The banks are not very different. The only formal interviews, where meeting with those team members that were leaving. Trying to get out of them what they were doing. Some of them were very cooperative, but there was this one guy who was very difficult. In the end I went to XXs manager and told them that they should let this guy go today. And he was gone the next day. It was my colleague who came in with me for the knowledge transfer, he sat next to him doing man on man knowledge transfer, and it was pretty easy because he had written much stuff that this guy had. This was done in maybe two weeks. In Iceland you have 3 months termination. This happened in one day. This increased the moral in the group.

So you used Landsbankinn-email as a channel for communicating with XX and the team leader and the other team-members?

Yes, I used that more than the Miracle-email. When I felt that I was not really Landsbankinn-employee, I sent from the Miracle address.

You were there and observed? You interviewed? You used email, and you called with XX and the team leader?

Yes, I had informal meetings with both XX and the team leader. I would try to get them in for a meeting for 15-30 meeting every day. Just to discuss the feelings, how their diet was going, their children were doing. Just to get to know them as a colleague. And understanding how their were feeling, do you feel that the project was evolving. Things are not always working out as you planned to. When you work in a bank your life is controlled by an outlook. Peoples book meetings. I wish someone would research this. How people can stop booking meetings in outlook, it's a waste of time. People control your life/schedule.

You also had these 15 minutes every morning as well? Were you in charge of that meeting?

Sometimes, I tried to step back, but when I felt that they were out of control I took some control and helped them. So I tried to teach them this discipline and structure of the Scrum method, and it worked pretty well.

So you tried to step back to give them (the team leader and XX) more responsibility?

I also had these meetings because of the differences between the two managers. The team leader was so disciplined so she could manage herself and the team. People would not talk to XX in a language that she understood. It was getting really frustrating for her, because she was really emotional and stressed because of this. And this, informal sessions, was set up to help her. Almost like psychologist. Tell me about your problems and how I can help you. What I also did was when I was at the office or home (not at the bank) I would analyse what did I see today, what do I think can be improved? Maybe once a month I would send the manager some suggestions. What I have seen, how I think you can improve this. All of this actually have the affect that they asked XX boss and CIO to meet me. So I talked to this to and told them about my idea. This is great please continue, and then they went over to other things. There was no discipline, and no one to continue in this direction. This is why I think that I should have been put to help in this department in the end. That could have been more much more effective to implement Scrum in the higher level. Politics can be a really big hurtle to overcome when you implement, and want to implement changes.

So, training maybe? You trained XX, and told them what to do and how they should structure their team. Did you have anything training for the other employees? Lectures? Talks?

I use these informal sessions, using the whiteboards. I would introduce scrum and Kanban, and then I would have one session (a whole day) both departments came with me, we went to a fun location. I talked a couple of hours and then we have this Kanban simulation where the two teams compete. I had a colleague helped me supervise. That was really interesting. Like I told you, Kanban is about putting work in progress limits, so you do not do too much, you actually put emphasis on frequent and not how busy your work seem to be, not just an illusion of doing work but that you actually doing work. One thing that we wanted to do in this simulation: We wanted to raise the limit, and give out more work. The response from the teams was that we need more resources etc in order to complete. Our response to that is to trust the method, let it run for a time. Already here you could see great differences between the two teams. The difference between the two team were radical: The team that

disregarded the limits were raised, they could not complete. (Draws a metaphor to how things where different). So we had this type of training, and I kept talking about these things/methods.. I sent them links to books I wanted them to read, I sent them articles to websites and articles. I was constantly trying to get them to understanding the methods, that I was implementing. This really functioned when I was there.

A part from Scrum training... did you do any other type of training? For example, how to motivate the employees in the change process? How to overcome any resistance?

Yes, I explained to them how you should do these things. B and K often talked together, they were friends they know each others teams. They talked about these things, we should talk to him like that, and her like that.

Sometimes it was a one on one thing, other times in group sessions?

You were talking about these meetings, in the aftermath with K, were this kind of the package or were that your own initiative?

No, this was just on my initiative, I was curios on how things were going, and if she had any questions that she wanted to talk to me about. Also for me to get some feedback, are you still using these method, how quickly does it fade from you memory, how fast does the discipline fade. Last time I spoke to her, 3 months ago, she said yes we are using it we have changed something...

You though the project was a success?

Yes.

For XX as well?

Success for her was that she left the office, she was the wrong person for this job. They did not do her any favour of putting her in this position. She had problems upwards and downwards. I think she had difficulties understanding, respect.. You find yourself in a position, where there is no good place to do anything. So I think that's the reason for the projects success, or failure. On the other hand: Why should we (the bank) change our language/native language? She comes to our country. Is it natural that we should change our language to English? The bank sent XX to language courses, but she could not/wanted to learn Icelandic. So unless you are like Steve Jobs or something, you will have problems earning peoples respect.

One thing that is interesting is that it was a weekly meeting with the directors within the IT department, XX got so upset in these meetings that XX left the meetings/presentations. She actually got the permission for me to go as a sitter for her. I went to 3 of those meetings, before the other directors complaint about he presence of the "stupid consultant". It makes sense, but it illustrates the difficulties that XX was in and that the project management was so unsuccessful. She was full of ideas, and she told me about them, then I took it further to the team-where it got accepted. XX told be that she had used 6 months trying to tell them the exact same thing.

What do you think is the most important elements in a client consultant relationship?

Remembering that you have two ears and one month. Listen, listen, and listen to the client. Let them speak, often they will find the problems themselves and they find comfort in just talking to you. Even when I was working as a technical consultant at DBA I though half of my job was to be a psychologist, you usually get cold in when there is an issue in the company. People are not doing the job properly. Some things are wrong with the system, the support is bad. Listening is the number one element. You can come in with all these ideas, and written pages and laptop and slides, and slam it in their face.

"I" have been in this place in 10 years, and you think that you can come in here and solve the problem in 10 seconds. They will shut you out.

So to create a mutual trust is important?

You have to establish a trust, you have to show that you respect people, respect their job, and not just tell them that you have a better solution.

From your point of view, what do you think is the most important for the client to become independent?

I think you have to be absolutely confident in what you are doing, and that you have to be so confident in your self that you are not afraid of sharing all your information with the client. Even small trade secrets, not confidential of course. Articles for examples.

A way for the client to evolve and develop. If I have told you everything I know I have to go find new things to learn. People will respect you more, and besides people only remember like 5% of the things they are being told.

Have you experienced that technical consultants/programmers speak a different knowledge?

There is a huge gap when people use technical terms. Being able to bridge IT and Business is very important. If you can translate the IT-business/business-IT then you have put yours-self in a good position.

Do you think this is a problem in the consultant industry? Or are programmers in the background.

There are people who can close this gap. But the main problem is lack of understanding. You do not care what the system does for the end-user, and there is no communication between end user and support.

What can you do to bridge this?

You have to have an understanding of both sides. In order to do so you have to listen to both sides.

Were you present at Landsbankinn every day?

3 days a week, 5 days a week, 3 weeks: There was no clear contract when we started working. I started sticking my nose around.

How was the budget and timeline developing?

This was ok. Time and budget was not an issue, this might be because the management saw results and that they were happy.

Is this normal?

Yes.

We thought it was normally specified in the contract?

I think that this can be different in Iceland. Because people know each other well. In Texas all things were prespecified.

Cause that's the thing in Norway, projects goes over budget.

You should read about the NHS case- the biggest failure in IT.

In your experience, does the client often know what the problem is and what he wants?

Sometimes we get called in because the system is slow, then we find something else. Can you give us a valuation of the system? Is it any good? Is it outdates? What about competitors? What are they doing? What is it in the market in the software? Anything new?

Do you have your own software?

Yes. It is not business systems, but management in one for computer systems. We can offer our clients a 24/7 support service. The phone rings and we can check it out. We do project software for clients, but that's for them exclusively, but they are very tailor maid for them. We re-sell software, like Microsoft. Then we often use partners at things that we are not good at. We focus on what we are good at. This works well for us, not that we are dragons that try to do everything. I am very interested in hearing what the team leader has to say, and in your findings in the thesis. And Husasmidjan as well. I was involved there as well.

How were you involved?

Miracle delivers the databases to Husasmidjan. And help them with transferring their data into the new system Microsoft AX 2012.

In short summary: The best consultant balance:

- 1) Overconfidence
- 2) Listen

### Appendix 6- Transcriptions: Team leader, Landsbankinn (06.05.15)

We know a little bit about the project, but we are interested in hearing your perspective, and especially interested in hearing who initiated the project.

I have some questions in regards to your background.

I studied business administration at Reykjavik University, and then I worked for one year, and then I took my masters in Chicago in finance. And it was basically more like financial engineering. It was a very technical program. And then I came back and started to work as a credit analyst in the risk department in Landsbankinn. And then I changed to a different job within finance. And then there were these organizational changes where I eventually become group leader for this informational management group. So my background is both business and technical.

#### What is your role now?

It is group leader for information management. So basically we are a part of the finance department and we are a small information management group. And then our co-group is the (kr). That works heavily on data and information but we are more separate in the way that we service all the divisions in the bank. Basically all the information goes through us and we produce information for most of the bank and so we are trying to organize the information and data more than we did before.

So it is like a data warehouse?

Yes, we would work with the data warehouse team. And basically we analyse for them, like business intelligence. We are the business intelligence group.

So basically, a different team initiated this than my own. And basically the goal was to improve the process of working and delivering IT-projects. And there is this relationship between business and IT that is sometimes becomes frustrating because of IT taking to much time to delivering the goods that the business wants. So this is basically to improve the process and make the requirements for IT projects more clear to the IT people. At the time, when this was initiated my team was established and we collaborated a lot with this team, so I basically saw that we didn't have a process to begin with, there were people coming from all over in the bank and we were one team and the focus was to deliver IT-projects. It is basically more IT than business projects, even though we are on the business side. So, we basically didn't have a system and the way the consultant introduced this and presented this to us, sounded really good. So, I got the permission from my boss to use his expertise. And he also worked with my team. And basically the goal was to have clear requirements. To have a system to work the process the project. So, basically to execute and take the requirements and produce them and basically do that between a certain time frame. And so, he introduced the SCRUM methodology and Kanban. And argyle points from methods. We basically started by having planning meetings where we discussed all the projects. We started to name product owners, so we would definitely know how to work with and when we would start at his projects he would have to be available when we needed some knowledge and guidelines. So we planned before each sprint and the team had the planning meeting. We estimated time that we had to spend on the project and basically we decided what the deliverable would be. Who would do what, and we started by writing everything on tickets and then we had a big board and we wrote everything down and then each one took a ticket and this was a daily SCRUM meeting and I was in the role of SCRUM master so if there was any problems I would talk to someone and try to resolve the problem and it was actually kind of the role the consultant as a specialist. He basically was there in our meetings and to just facilitate the program we were trying to adapt. Han he basically came in and gave advice and I talked to him separately in a meeting and he would meet up with the team, and he would be in the first planning meeting, and he would be in our retro meetings. So, this actually went really well

and we were very precise on every recording. You recorded everything down. And he gave us a lot of feedback and he was personal in this project. Basically he was like one of the team members, so at least the combination of my team was that this that he was a part of the team and working as a mentor. And everybody was enthusiastic about it and ready. It was hard to adapt this.

Why was it hard, what kind of challenges did you experience?

It requires a lot of discipline.

And how did you or the consultant handle that?

It basically never came up any frustration about it, but we talked about it, because this was something quite different from how we had been working. And are we ok with this? Yes, but it is kind of hard, you have to estimate how long I will be spending time on this, it just takes energy at first.

Was there any resistance to adapting the new processes in your team?

Not at my team, but at the other team. Definitely. Basically everyone was ready to change. Because before there had been a lot of frustration, we were not getting feedback from the business. We didn't know what we were supposed to do. So the frustration was before and everybody was ready to change that.

Because everybody realized how bad it was?

Yes.

The consultant was already working with the other team. That project was initiated by management?

Yes.

And who transferred the consultant to your team? Was that your request or management?

Yes, that was my request. And basically, management did not see the benefit in it, but they approved it in the end. Because we have a project management office here, and management was like, "why don't you use their expertise?" and I said, well the way the consultant introduced this, by using the scrum method, we will try to be very detailed, and this is something the project management office is not practicing. The project management does not teach SCRUM, and I want to work with SCRUM. And then management said ok.

Have you been working with the consultant or Miracle as a consultant company before?

No, not before. But some IT-teams have been working with them. And they have been, actually part of one of the IT-teams for quite a bit long time. So, the bank has had a relationship with this company.

Can I ask you a question about your team? How many are you?

At the time, I got some employees from this other team he was working with, and so I got them as a part of my team even though they officially work with the other team I was able to lend this employees.

Full time or part time?

Full time, so at the time we were maybe seven or eight employees.

How did the consultant interact with the team members?

He was interacting like one of the team members, so he was open, he has this sense of humour, he is this relaxed guy.

Was he present here at the office?

Yes, he was. He was both here at the office and at the other building, where the other team is. And basically he discussed with them at any time when they had a question. He would come over if he was in the other building. He recommended some papers to read and books. This is how he interacted with the team. And I think that was also a big part of how this implementation went well. Because of his character and the chemistry. You have to have the right kind of chemistry. For the other side, the chemistry was not the same.

What do you think was the problem there?

Well, some teams are in general just not in favour of changes at all. And I am not sure why that is, if it is just individuals that are resistant. It makes things more difficult, especially for the consultant to present things if people have already decided I am not going to do this it is more difficult for him to persuade people.

How did you and the consultant persuade these people, so everybody was on board?

Basically, there was a different manager on the other team, but in my group he basically went over this methodology and there were immediately two or three people who were like this sounds great, we have to try this and the others were maybe not as excited. But they were willing to try. And everyone was willing to try, so I basically did not have to persuade anyone. There was this introduction from the consultant, and we talked about it, how this would be, and after we talked about it as a team we decided, ok, lets do it. There was no turning back.

Was there any committee for the whole project or was it only you and the consultant?

Yes, just the consultant and me. Nothing like a committee. But I reported my to my supervisor just how this was going.

So he was not involved?

No, he was not involved. And I tried to make the project office, the project management office, I tried to set a meeting between them, but for the bank it went political. When I wanted to push him higher up, them immediately I felt a resistance from the management that there were not ready for a consultant.

So there was more resistance from further up in the organization?

Yes, because there is there is this project management office, and then you have a consultant that is teaching how to work projects, and you are not using the project management office. And now you are saying that lets have the consultant teach the project management team how to do it.

Did this project affect you or your team members working hours?

No.

So everything was working as normal?

Yes, and we basically of course, when we were adopting this spent less time working on actual projects when we were adopting this and what was surprising, was that since we were recording our time we just realized how little time we were working, and spending during the day and every time since then when I tell anyone else in the bank that his is the case that the average worker works four hours per day. The management becomes very, almost angry because this is just too shocking.

How did you and the consultant communicate during the project?

Basically we had almost daily meetings where we went over how things are going and we also talked about individuals within the team, like how do you think he is doing and how is he holding up with the system. How can we try to help this individual because he is not really dealing with it well. Because there are some individuals who will work according to the system very smoothly, while other individuals kind of had to, they didn't adopt to it as quickly. So then we discussed how we could encourage them, help them. So basically we communicated over the email.

*In regards to short-term wins, were there any short term wins in this project?* 

Yes, definitely. After our first formal sprint. The consultant said you have to have a party after this. You have to invite a lot of people from the bank, you have to show them what you have accomplished. Present, these are the projects from the sprint, so we did that, and everybody was so happy, and so proud. And we didn't do much, when you think about it afterwards, we did not do much, but at the time it felt very big and a lot of accomplishment. So, yes. And then we had these retro meetings which was also good.

Retro meetings, what is that?

Yes, retrospective meetings.

How often did you have these meetings?

After every sprint. We would usually have sprints lasting 2-3 weeks, and then have retro meetings after every sprint. So basically, we would go over what we learned and how we can improve. And I felt it was different how willing people are to communicate, and to begin with there was a part of the group that was always communicating like we learned this, and I would like to see this. But the other part of the group did not say much, and then in one retro meetings one of the silent persons said that I feel they are talking to much, they are always talking, which was good, so ok. So everybody took that in, so he was able to talk more.

Who participated in these retro meetings?

Basically the whole team, and myself and the consultant to begin with. But like I said, this required a lot of discipline. And from writing on tickets we went to the TFS system, which is kind of a SCRUM and argyle

computer system, or program. So basically we wrote our tasks and stories in the TFS system, just to help in meetings where we had the screen, and we did everything electronically.

When did you start using the electronic system?

Maybe after six months.

So the consultant was still here?

Yes

Was the consultant the one who initiated these retro meetings?

Yes, he basically went over how the SCRUM would work, all the rules, and the retro meetings was a part of this.

So lets move over to the relationship. So when you contacted Miracle and the consultant, did the consultant come in and find what the problem was, or did you already know what the problem was?

Basically he came over to do a different task. And he and one other had a different task, basically there where people quitting and their task was to do the knowledge transfer. And he immediately picked it up and discussed it with the other manager, and basically the entire process. How the team was working.

Was that why people were quitting? That the team was no functioning?

No, it was more like because they were not happy with the supervisor. There were a lot of people who wanted to have this supervisor's job. And basically this woman got it, and they were not happy with it, so they quit. And so him for a different task, but then he started to talk to this lady, the manager and he suggested or saw immediately how they could improve the entire process, and how the team is working. And then it started to roll. And she said, ok this may be a good idea. And we were working close, so I immediately saw the benefit of using the consultants' expertise.

Do you feel that the consultant understood your organization really well and your team?

Yes, definitely. And he was working as a consultant and he was analysing us as a consultant and I would say that I think that his previous job was in an IT-department in a different bank, and basically that gives him a lot of advance in trying to understand the organization.

So you are happy with what the consultant presented and what he implemented in your team?

Yes, definitely.

And how is it today?

Yes, that is a whole different question.

Can you start from when the moment when the consultant left.

So basically, everything was very organized and disciplined and everybody was enthusiastic when he was here. And he left and we basically kept on going with the system. He left maybe in February, so we kept on with the system to end of June. And then there was this summer holiday, so everybody was off for one and a half month, we did not have the whole team, so basically what we did was having a more flexible sprint. Where we had some assigned tasks for longer period. So just for over the entire summer time, because people were coming and going. And then the fall came. And then we started to discuss, should we start again with the same discipline and all the work, and also, there were a lot of changes in the team. So two members basically quit. So one moved abroad, and one moved to a consulting company. And we had new members coming in. So basically, we had to go through all the things again because there was two or three new people. So basically we had to transfer all the knowledge. How to adapt the system, but also everything else. Like where is the data. How do you work in the tool, how do you technically do this and work the system. So we decided, lets have a simpler system, where we basically, we are not as disciplined, we still have beginning and ends, and we know what we are going to do approximately in this period, we do not assign product owners because. What was the biggest problem is that to ask someone when we are ready to do a product and to ask someone outside of the team. You have to be ready at the same time as we are doing this. This was not working, because the whole bank is not working according to the system. So basically, the product owner, would have a different project that he would have to attend to. But we were working on his project. So basically there was a fight of time, so we stopped with this project owner thing. At least we have a project owner but he is not as committed as before. Just because we have it a little bit more loose. So we are basically still keeping this system and I am starting again the retro meetings because they were actually so beneficial. So we are keeping this system, but we are not as strict.

I have a follow up question, before the summer when you decided you would have longer sprints. Was this something you discussed with the consultant?

No, we discussed it with the team, like how or we going to do it now, because everybody is going on holiday.

And after the summer, who was in charge of teaching these new methods to the new employees? Was it the whole team, or did you assign somebody to do this?

I basically did it, because we have regular meetings and then I went over it with the new members. At the same time we were executing or following the system, they would learn because I would explain what they are doing.

*Are you satisfied with the way things are now?* 

I am satisfied with it as it is now, mainly because: with this system I am able to show the partners that I am working with what we have been doing. We have the stories, the projects, and the time. So basically every time, every quarter I send out to the departments what we have been doing, that we have been spending this much time, if you would charge for it, the bank is not charged for it, the bank is not charged for it. But if you would this would be the optimal way to do it. This would be the optimal system. So I am happy, we are still recording time, but we are not estimating time, but we are recording how much time we spend. So I am happy with the system this loose, because rather than more discipline like before, mainly because of the project owner. It was always frustrating because we were always having requirements to the business. We were saying like: you have

to know what you want, you have to be involved in this project, because we are working on it right now. We set aside two weeks for this, so you have to be ready.

So you have to rely on that person (the project owner)?

Yes, but the discipline in the bank is not the same as we were practicing, so it is difficult to have it that way. But definitely, too know what you are going to do, to record how much time, to have a person that is some kind of project owner, who owns this and is responsible for this, is something we have taken from the whole system. And I don't think we will ever leave that. We will always record what we are doing, to have overview, to plan, we still do that. We still have our backlog. But what we are not doing is that we are not estimating how much time a project will take, we are just working as well as we can.

Are the results just as good now, as they were right after the consultant left? For example in regards to efficiency?

Yes, I think so. I mean it is not totally comparable, because we have had so many new people. So they are learning, so the efficiency is not as high, or as good. But I would think so. And I think maybe it is easier to for people that are coming in, well I'm not actually sure. I kind of have regrets of not sticking to the discipline system, but then another part of me says that the bank is not ready for it. So take what is definitely benefiting and keep on doing that.

Regarding how you would communicate with the consultant, he was here almost every day in the office with your employees, otherwise was it email and phone calls etc.

Yes, it was emails and phone calls. Yes, that is. And also after hours.

Was it informal?

Yes, it was very informal. Very informal.

So, you have not been talking to the consultant since he left?

No, well we have had coffee.

He has not come and evaluated the current team?

No, he has not.

Would you think that would have been beneficial?

Yes, just because it is like it is always good for you to be reminded and to have someone come with a second opinion and looking over. Coming with advice, saying you may consider this, or that this is lacking from the picture.

Since you have gotten some new employees he could have helped you?

Yes, definitely, he could have helped with the teaching and such, and giving structure to the situation. And I don't know if I would be allowed to bring him back, because there is this consultancy freeze. The bank is cutting down on consultants, so I am not sure I will get the permission. But maybe.

So management doesn't like consultants?

Yes, right now. Because they are trying to save money, they are cutting costs, heavily.

Is this in special regards to this bank?

No, it is in general for the banks.

Back to the initial part, when the consultant and you presented the system and the new way you were going to work. Did you have a meeting where you called everybody, and everybody sat down and you talked and presented or did you send an email?

No, we basically called everyone in to a meeting and I said that the consultant was here to introduce a system and I wanted to discuss if we would like to adopt it.

So there was a discussion?

Yes, definitely.

Did the project go over budget?

Basically there was no budget set. And that is what is lacking in this bank, we don't have any projects that have budgets.

Is that a problem?

Yes.

Why is it like that?

Lack of discipline.

If you were able you would like to work with Miracle again?

Yes, definitely. And I have been trying to recommend them within the bank. Because I really see the benefit of this. But it is, the culture here is not that disciplined, like in other countries. But maybe we will get to that point.

Why do you think that is?

It is culture and I think we are not experienced. We are pretty young in the business environment of the world, so we lack experience. And we are used to do just what we like to do. Just decide for our self. We are a small country, people know each other. So I would say to a friend "so I know this person I would recommend to you, you can hire her" and he would do that. People are so close, we don't have this formal thing of being professional.

How did the consultant gain you trust and your team's trust? Did he have it from before?

No, we basically didn't know anything about him. But the way I saw he was working with the other group, because I attended some meetings and I talked to him informally, and in that way I saw that he was this trustworthy person. And he was kind of my type, so if it was a very formal guy that would always do things at nine o'clock, not at ten o'clock. So it is something you get by your feeling.

Do you feel the consultant shared everything he knew?

Oh yes definitely.

He did not hold anything back?

No, definitely not. He was trying to make himself unnecessary. Basically some contractors they keep something to themselves, but he was not that type. Or maybe he just hid that very well.

So he tried to make it so that there was no dependence between the two parties after the project was completed?

Yes, definitely. But he sent me emails some time afterwards asking how things are going. And when we had coffee he would ask how are you doing and how is the system going? So he would just check up. But just a superficial contact.

# Appendix 7- Transcriptions: Team member, Landsbankinn (06.05.15)

(Introduction by interviewers)

*In your perspective why did you do the project?* 

First I heard the consultant talk about it, how he was implementing it in IT. And then I went to talk to my team leader, and said this was probably a good idea for us to try out. Because we were a new group and we had a lot of reports we had to build, and we were wondering how we were supposed to organize all the work. So he had a meeting with us and explained how the SCRUM works and tried to implement this with us.

And how was it you were working before?

We did not have any structure. So it was hard to what we were doing and how it was progressing and stuff like this.

Was this a general consensus of the group or did anybody think it was working optimally?

Yes I think so, but we were actually a new group with new people. All different people, all people we had not worked with.

So everybody was motivated and felt the need for the project, no resistance?

Yes, they were. And there was no resistance that I saw. Because we were a new group and we wanted to do a lot of new things. And everybody was very on board with this.

So you initiated the process?

Yes, I told my team leader about the consultant and he went to talk to her.

But how were you aware of the consultant?

I was in a meeting on IT; I'm a computer programmer so I went to a meeting there. And I knew about the SCRUM-method.

So you presented it to your team leader?

Yes, and she had this meeting. And then he started to come to meetings with us and explained how it works.

So what where your expectations before the consultant came in and presented and tried to implement the SCRUM?

I was not expecting everything to be perfect, but receiving something new to work with. When you have been in this business for a long time you don't think everything is going to be perfect, but perhaps to take something out of this and use it.

Was there any resistance not from other members in the group, but from elsewhere in the organization?

Not about this particular thing, but when we started to use this it was kind of hard to work with the business owner, it was hard for him to completely understand it and if we wanted to implement them they did not have time.

Was this the project owner?

Yes, but I think that was the problem, you have to have them on board and were not quite on board.

How was your relationship with the consultant. When he came in to the team, what was he like?

Our relationship was very very good. It was really nice to work with him. And he lot of good ideas, and he explained everything very well to us and he was in the meetings and explained how we are going to work with this. And I felt that he had a lot of experience with this. And I think he was very good.

Did you know the consultant from before?

No, I did not.

How did he build trust, and how did you feel comfortable? Did he do anything specific?

No, I think it is just his character. He is really easy to work with. I think it is just that. And he knows a lot of stuff, so you respect that.

So you respect his wide knowledge and his competence?

Yes.

When the consultant was here as your team leader told us he was present a lot and did you approach the consultant with some questions?

Yes, I did

So he was talking to everybody?

Yes, he was. Everybody in the group. First we had the daily SCRUM meetings, discussing the SCRUM. And he came to the daily meetings. And the would explain like how we should try to do it like this. So it was very good to work with the consultant.

So everybody felt they could approach the consultant?

Yes, they did.

What it is low threshold to approach the consultant?

Yes it was. It was very easy to approach him. You just called him or sent him an email. And he came everyday.

So phone calls and emails was the main source of communication aside from the daily direct contact?

Yes, especially in the beginning when he was here everyday direct contact was what we used the most. And after that it was mostly email.

Did he interview you at all, or did he have one on one session with the team members?

No, he just met with the group. And he was just like one of the group members.

Did he walk around and observe how you were working and used the system?

No, mainly he sat at the IT-site, and we are sitting here. So he just came her to our meetings. He came to our daily meetings, and sometimes to the SCRUM meetings at first. But he did not sit with us.

How were you informed when the project was supposed to be started, were you called in to a general meeting, or did your team leader just send an email.

We had a lot of meetings. And he came with us for the first few meetings, like this is the first SCRUM meeting. And he also came to the first retro meeting and explained how everything was working. And he taught us how to use these methods.

During the project did you have goals underway and when these were realized were you encouraged to work harder?

Nothing like, oh, this worked on this project, now we will use it on all our projects from now on.

Were the processes working?

Well, we were always trying to improve it. And in the course of the three months of course we improved some of the stuff. But nothing like a party or anything.

Did you feel it was easy or did you feel that you had to put in an increased amount of effort as a result of this project and the new process?

It was hard to work because you had to plan everything and you have to plan your work for the week, and say like I am going to work ten hours on this, and this was something we had not done before. But I thought it was very good, because sometimes when you are at work you just are doing a lot of stuff, and you don't know after the week what have I done, but I think this was very good.

Did it give structure?

Yes it did.

So you did not have to change your working hours?

No.

Were there any meetings during the projects, like reviews? How the project was going, any communication between consultant and your team leader? Was everybody on board all the way?

Well, we had the SCRUM meeting which was part of the process. And consultant was always a part of that in the beginning, and then we discussed all the issues we had. It was not special meeting for that, it was just part of the process.

Were there a lot of issues during the project?

No I think, it was mainly with the business owner and access to data and we had too long projects, and we had to break them down. It was something we kept on learning during the process. Because it was new to us, and also all the new projects we had.

Did you enjoy working with this new method?

Team member: yes, I did.

How is it now?

Well it is kind of different now. But we have adapted to it, now we have this site where we are putting the project for the week.

What is it called?

It is called SharePoint. So we just put the project in there and just see what I am going to work on this week. But we don't schedule and plan how many hours. I am just saying I am kind of supposed to be working on this for a week. And now we are going to try to have a daily meeting, because sometimes we have meetings on Monday, and then the Monday after we are not sure how everything is going.

How was it when consultant left, did it change right away?

Yes, it just went a whole other way.

Because he left in February?

I don't remember when he left. But he had already left our group, he was more on the IT-group, so more on the other side. But yes, it was more structure when he was here. Because he said, you have to plan this, and this is very important. But when he is away, it is like your parents are away. Everything glides.

Do you think it was better before or better now?

Perhaps it was too much structure when consultant was here. But I think we are too loose now. So it should be something in the middle. And we are trying to improve.

Were the results better when consultant was here?

Yes, at that time yes. But that is partly because the projects were a little bit different then. We were a new group and had a lot of new things to do. Like fifty reports or something, and now it is like more ongoing and a little bit different projects, so I am not sure how much structure we can have, but I think it should be something in the middle.

Does consultant know that the process has changed?

I think so, I think my team leader keeps meeting with him, so I think he knows.

Would you like consultant to come back?

I think it would be ok, for him to see how we are doing it right now and how can we improve in the environment we are know. Yes.

Would you like to work with Miracle and consultant again?

Yes, I think so. Just for a short period of time.

If this is what everybody thinks, why doesn't he come back?

There is saving in the bank, you are not supposed to have any consultants.

So it is a management issue?

Yes it is.

Your team leader informed us that there had been some changes in the group, some new employees?

Yes, it is only two of us still working in the team.

Who is teaching the new employees and team members of the SCRUM method?

We are just showing them how we are doing it. But I don't think they know anything about SCRUM. We had our first retro meeting before this interview, and they had never been to a retro meeting before this.

Do you have any written routines?

No

So, everything is in heads.

Yes

Are you comfortable teaching others?

I don't think I know that much about is so I can teach others about SCRUM. Well I know the methodology, but we are not working as we are supposed to.

You have your own method now?

Yes, I can teach my version, but not the correct method. But I know SCRUM is supposed to be like this meeting, where you have to plan it with some cards and stuff like that, but we have never done that with the new version and the new employees. They don't know how it is supposed to be.

Have you totally moved away from the traditional SCRUM?

For now yes, we are not using the cards, but we can plan our projects a little bit better.

Do you think the project was a success?

Yes, I think so. It is working very well.

How have you been measuring it?

We have been measuring it in the way that we have a lot of ad hoc from the branches. And most of my work was just replying to that. But now we have a report that can answer that for them. So that is very good. And we had a lot of reports in "bowl and we have a been throwing out user reports, old data and stuff like that. And actually first when we started this group, I was in one part of the group, and my team leader was in another part of the bank. And sometimes we got the same requests. But now there is just one group, so the business knows whom to contact. So I think that is a success, in our little group.

How many are you? Seven?

We are four.

How many were you when consultant was here?

Well, it was a part from it as well, we were all sitting together. I think there was like four of them, and four from us, so eight. So they went back to IT. And two of our people left, and we got two new ones, so we are four right now. Just be and another one which are from the original team. So we are always teaching somebody something.

So you guys are in charge of teaching? Not your team leader? Does she kind of just supervise?

Yes, I am showing them where the data is, how we are going to start this and this.

Do you feel that takes a lot out of your actual work duties and your time?

Yes, and actually, I took a lot of time to teach them and then they left.

Does that make you feel kind of negative towards the project?

No no, it is ok. I get used to it.

But it could be more optimal process behind the teaching?

Yes, definitely.

How do you think it could be better?

Perhaps if we had more structure with it, so when new people arrive we can show them something we have written down, but we don't have that. But we are trying to improve that. We have one note now. And we are trying to add some new stuff in.

So there is no real follow up from consultant?

No, he is sort of out of the picture. Just casual meetings with my team leader. He comes here for coffee. I don't think he is charging for it.

I have some questions in regards to your background; you said you were a computer programmer? So you have technical expertise?

Yes, and then I went to learn some business. I don't have a bachelor degree in it, but I studied it. I am a computer programmer with a business part of it. And then I went to the University of Iceland and I did some more business.

How long have you been at Landsbankinn?

Ten years, first I was in IT, and then in 2007 I moved to the business side. But I am kind of collecting data and making reports. And doing analysis on this data.

And then just a general question: with your IT-expertise have you heard about difficulties in in communication between consultants and clients? I am thinking like programmers... we have a theory about programmers speaking a different language than the consultants and clients.

Yes, they speak a different language. But it is very good to learn both business and the technic. Because then you can talk to both sides. I can talk to both sides.

But have you experienced that some programmers and business people have lack of communication?

Yes, I have that.

How can you solve that?

I don't know, I think some programmers just want to be here and not talk to anybody. I just think you always have to have some middle person. Some of the programmers just want to sit in a dark room and work like this. I think it just depends on people. And the business doesn't understand everything that IT-says.

Do you feel consultant gave everything he could to your team? In regards to knowledge.

No. Not on the SCRUM.

Does he have informal or informal communication?

Very informal, he is very outgoing and fun to work with. You do not feel like, oh this is a contractor and you stay back. It is not like that at all. But yes, very easy to work with. And you could notice that he had a lot of experience. And then you respect him, and that is what is easier to work with.

So you trust him?

Yes, I trust him because sometimes you work with somebody and you just know they are full of shit. But you always know that, because if you know something about the issue, and you know they are just full of shit. But you don't get that feeling with consultant.

Is consultant the first consultant you have ever worked with?

No, in IT we have worked with many consultants. There are always coming people that are looking at the bank. And they want some data, so I have worked with many consultants like this.

Did the project go as planned or consultant stay here longer than he was supposed to?

No, I think it was.... Because he was mainly in IT, he was just coming to us when we needed help.

You said he was here once a week, was that for the entire period or was he in your team more in the middle or the beginning?

In the beginning he was here more. He was here for every Scrum meeting and explained how it was going to work.

So he was here every day in the beginning?

No, he came once a day when we had this daily meeting. And then he came to the planning meeting and retro meeting which I think was like for the first two rounds of this SCRUM round. But after that he would just pop in and stuff like that, and we could ask him if we had some questions. And perhaps my team leader talked to him outside of this, and asked him some questions. I don't know, I am not sure. I haven't asked her.

Do you know if there were any problems with the other team? Since it seemed like he used more time there.

The problem with the team now, or when he was working there?

When he was working there, and now.

Team member: there were more problems there.

Than in your team?

My team was more optimistic towards using this system, and the other team was against it.

Why were they against it?

There are just old dogs that are there and they don't want to change their working.

So there is more resistance?

Yes, there is more resistance there.

Why is it so?

I think it is just based on the character there.

Do you know if consultant tried any techniques, how did he deal with this resistance?

I am not sure, he tried again and again.

Was the project a failure, or was it also a success at the end?

I think it is a bigger success with us than the other team. But you should talk to them. I think there was more motivation in our team. We were a new group and I think a lot of it was based on the group and the individuals. So we were keen on having something new to work on. And the other team was like: oh we have done this so many times before we are not keen on doing this again.

Do you feel consultant understands Landsbankinn as an organization? You values, your culture, how you work, how your group works?

Our group, yes, very much so.

## **Appendix 8- Transcriptions: Project leader, Husasmidjan** (06.05.15)

What are you doing? What is your role in this project?

I am the project manager for the implementation. I have been working with the system for 7 years, so I have the knowledge. I am the only one in the company.

I was hired as project manager for this project, and I did not work at Husasmidjan before.

Can you tell us about your education?

Business, not technical education.

Who initiated this project? The change of the system

We were running a the old system, the license were out-dated and we really had to change/invest in a new system and we were running out of time in order to change this before the license went out. That was basically the reason for this change.

How were you brought in?

The CEO contacted me, we have worked together before.

Everybody at Husasmidjan was on board on the project?

There is always a resistance.

In what way?

The thought of changing the system, the system that we are used to that we have used for 15 years, people are scared for the change. There was no resistance, people understood the need for it. Not that difficult to get people on board because people had to. They knew that the system was old.

What did you do to overcome/persuade this people to get on board?

We tried to inform people/a lot of people who were a part of the diagnostic phase, who were brought in quite early in the phase.

How did you inform people?

E-mail mostly, and then some training and seminars before the launch.

Did you do the trainings/seminars?

Annata did some of them, and then the key users

How may key users were there?

10 that helped in the seminars

How many were engaged in this project?

25-30 people

What were the different roles?

From all departments, project managers, sales people, finance department

So no IT?

We only have 1 guy who knows IT, we outsource everything

So you are very dependent on external help?

Yes. That was why it was so important to get a new system, because the external knowledge was disappearing with the license expiring.

How many were influenced by this change?

The entire organization, because everyone is influenced. The ERP system affects all parts of business.

We are interested in knowing more about the key users. Who are they? What kind of people are they in terms of background information?

Sales mangers, finance people, project manager, they head of accounting.

In your opinion, what are their responsibilities in a project like this?

It was very important in the diagnostic phase to bring to the table all the requirements that we wanted the new system to fulfil. No matter how often we spoke to people or called them in for questions, you always forget something, but try to list everything up. So there will be fewer surprises. Of course, we had some test-systems were the key users could learn the systems and try to get a better understanding of the system.

The key users are responsible for the training of the end users?

Yes. The key users are responsible for training the trainer. The seminars did not work that well.

Why is that?

We started too late on the training session in the project.

What do you mean by too late?

The knowledge of both key users and end users were not optimal at the time of the lounge. The key users should have been trained better, because they are not able to train the end-users.

When did this project start and end?

It started two years ago. The first meeting were in March 2013. And the go-live was in 1 of March this year. The training started in late January/February?

You have started using the program now?

We had 3 go-lives; the first was in January in some parts of the company. The training before that was not that huge. Only 30 people. They got access to the test-system 3 weeks before go-live.

Do you think it is a good system? Did it meet all your expectations?

Yes it is a good system. All systems have their faults.

What have been the main challenges in this project?

That the project has decreased performance. Taking too long before we saw any results. Still the system is too slow and brining troubles.

Has that anything to do with the external consultants?

Probably. But this system tend to be the same difficulties as we had.

The training, who's fault was it that it did not work?

Probably both. There were no manuals (written), we had to make some of them our self. When we asked for manuals for some of the parts of the system, the consultants did not have any.

Did Annata meet all your expectations?

Not all.

What could they have been doing differently?

Time schedule that we tried to keep track on. Some things started on the right time, but then they dragged. We were soon to go-live, and many things very still missing. We therefore had to delay the go-live, and take it as it is.

Did you go over budget?

No, only the time-line.

Do you feel that Annata understood your organization and were able to design/develop a system that was in hand with your organizations purpose?

Yes I do.

Did the consultants come in here and observed how you did things?

Yes in the design phase we had sessions with the key users. Before we talked with them we made this requirement list, yes they had a clear understanding

Did they interviewed people at different departments? And who?

Yes. Only key users. Nobody, else.

Why did you choose Annata as a consultancy company?

We did a comparison on two companies. This was before I came in as a project manager, so I do not know.

Have Husasmidjan worked with Annata before?

No, the old system was from the other company.

How did you (Husasmidjan) prepare for this change/implementation?

We tried to take it not like this Big-Bang go-live in the stores, but had this POS systems in the stores (registers) and we were able to let the people start using them before the go-live so they could get a feeling on that new system. Only in some of the stores then.

What happened to the old system?

It is still a part of the new system, there are a mixed of data

Has there been an integration problem?

There is always a problem with the integration?
Your roles and responsibilities during the project?
I was the contact person between Annata and their project manger. I was a head of time-scheduling.
What did you do if they did not meet schedule?
I would comment on their adjustment.
Were there any reviews/updates along with the project? According to the plan?
Me and the project manager at Annata had a weekly meetings were we went through the time-line of the project and we had monthly steering-committee.
How many people was a part of this steering-committee?
Both project managers. Then IT-guy from H, and project owner, and one other from Annatta. 5 people in total
Do you have other responsible besides the time-schedule?
Yes, I did mainly all the first testing on the developments. We had the requirements list and the requirements were developed and I tested the first time./first testing. When it was good enough according to the requirements I sent it to the users for the test. Since I know most of the system I was able to do all this testing.
Were you the only one testing?
I only did the first testing, and then the key users.
Then you communicate with key users?
Yes.
How did you communicate with both Annata and Key users?
Meetings
Annata was present here?
Yes
All time?
Yes.
How many from Annata?
Most of them 4-6 persons
Did they go around and observe?

Programming, for the most. Integration and developing. When we got closer to the go-live, business consultant also. The consultant mainly was between the programmers and the users.

What did the consultant do?

They were setting up the system (basic), and additional requirements/problems from the users (functional design document). A list of what should be done that they deliver to the programmers

Did you communicate with the programmers?

Yes

How did you experience communicating with the programmers? We are asking because we have this hypothesis that programmers speak a different language, and that it can be an issue in this communication.

For me it has not been a problem.

What about in general projects? Do you think this can be an issue?

Annata is not big company, so I think that the programmers there are used to working with many different users with different background/assumptions

Can you tell us more about the steering-committee? What was the purpose for their meetings?

Just to keep track of status. As well as all changes in the projects that affected the price or other milestones that had to be approved in the committee before we (the programmers) could work further with them.

Can you elaborate about the time-line of the project? The first phase you designed the contract, what happened step by step?

We did first clarification phase, that was couple of months. That was to identify our needs, and to identify our requirements some more. We went through the requirements again. We took each system module went through all the requirement with the key users, to get an understanding and make sure that we had a mutual understating of the requirements (all three parts). And to identify additional requirements. From this we got a list of new requirements, now we were able to update the list before we signed the final contract. We were also in a situation were we could walk away if Annata did not meet our requirements. This was a couple of months just to get the contract signed. The real worked started in the mid of February 2014: we had all machines and the system to do so, the set-up. HR was the first module.

How far over did the project go in time?

The project was dated February 15. That was a bad date, because it was not an option to go-live in the middle of the month?

Have you go live now?

Yes.

So, have Annata left?

No, they are still here. When we went live, we had a call centre, were our programmers and consultants as well as our key users had to help. Annata is still here.

Annata is providing support-service?

No. we had to get people from Advania to be in our stores and warehouse.

Why?

We needed more persons

Do you think that the key users work load has changed?

Three guys in inventory control, who has helped us in the call centre as well as in the retail stores. It has definitely changed their work.

The first three weeks after the go-live they was totally dedicated to this project. Now they are mainly doing they real job. Their job is flexible so they were able to step in.

How long do you think Annata is going to stay here? Will they ever go?

We will always need to have a technical support. We are 400 employees so we will have some phone number or email that they can contact.

Do you know if Annata can help you with this?

No they cannot. The ERP system at the moment we are doing the support our self. The key users. Annata do not provide the service, so we either have to do it our self or.

What do you do if you have a problem and the key users do not know what to do?

Then we contact Annata.

So the key users train the end-users, and Annata train the key users. Who helps you?

The consultants. We have this phone number and email that we use to monitor our self. We try to get the users to only use this to report difficulties or problems. So we can forward the mail to the right person

Are people still resistant?

When the system is crashing or not performing, people get angry. When the performance gets better, the motivation increases.

Where there any big problems along the way? Where there any successes along the way?

One part of the project was new webpage. Set up in the Microsoft environment in SharePoint. This was Microsoft product to use the ERP system and link it to SharePoint, and the webpage on top of that.

And this worked?

NO. The product was not good. Full of defects. So we had to cancel that project and had to go a new direction. The retail system was more difficult than anticipated.

How was it more difficult?

It was planned to work in August 2014, and roll out the rest in September/October. But we ended up switching on the first one in December, and it was very close to the go-live. That was probably the most disappointing thing.

How was it decided about this ERP system?

Mainly because of the old-system.

Would you have chosen the same system?

Yes probably. The system is very good. Because we have a complex organization, the system is (this version) including all our needs into one system.

Do you feel that you have got full utilization of the system?

There is only two months since go-live, so its difficult to tell. There are definitely some potential to get more use of it.

We are interested in investigating the relationship between you and the consultant. Do you feel that you know the consultant at a personal level?

Yes, I knew them from before.

Did you communicate with what?

Email meeting phone. Also, in the second half of the project I was located in the same room as them.

Informal or formal?

Informal. Easy to communicate. Low threshold to ask questions.

Where there any communication issues?

No not really. It was ok.

What do you think about now when entering the last phase of the project. How will it be when the consultants leave? You think that you will be able to use this system, or will you be dependent on help from external people?

Since we do not have any in-house expertise, we will always be dependent on some-service.

And that's ok? Would it be easier if you had the knowledge in-house?

Yes. Definitely.

Do you know why Husasmidjan do not have an IT-department?

Been like this for many years. Just the way it is. I don't know.

Does everyone understand the new system?

NO, not yet. Not all of them

What are you doing/are you doing anything to develop this problem?

Yes we are trying to make short-videos that we send out through the intranet, that illustrate how to do things in the new system.

Does Annata help you make this videos?

No.

What could Annata done better? Or were they perfect?

Not at all. The training and the manual could have been better. Finishing things up earlier, so we more ready at the go-live. Also better testing before the go-live. Annata were working on many projects at the same time, so they had difficulties sending enough people to work on the project. Put some more effort finishing things up. This also is the reason why the project dragged. Some of the modules in this version is new, and they had not invested in knowledge in this new version. In other words, they did not know the system them self. They had to call for help. After the go-live it was some issues and then the programmers had to sit down and read the manual from Microsoft for the first time.

If you could, would you choose Annata again? Knowing what you know now.

Yes, I am not sure anyone else would have been any better. They are also facing too many false in the system, which is a false from Microsoft and are difficult for them to handle. That takes a long time to solve.

If it's a false in the standards system, they have to go to Microsoft.

What will be your role in the future at Husasmidjan?

Probably not as project manager for this project, but something else at Husasmidjan?

You do not have a long-term contract with Annata?

No, it ends with the project? Will you work with them again?

We have not discussed this yet. Do not know what kind of service they will provide. We do know that they will not provide any end-user support, but what kind of service they are willing to provide and at what price.

Is it a lot of competition on Iceland?

LS retail and Advania, three ERP consultant companies.

Do you feel that Annata shared all their knowledge with you? Gave you everything that they had?

No, I have a feeling that they tried to solve this problem and then move forward instead of showing the persons how to use it.

Did you communicate this to Annata?

Yes, but nothing happened. I had this feeling like enjoy doing this. Most of the time we are really satisfied, but there are many different consultants, with different characteristics, which makes it very difficult.

Have you worked on similar projects before? Previous experience in regards to this size?

No. Company size yes, but not project.

Overall you are happy with this project?

The go-live was harder than we expected, there were too many difficulties. Getting closer to done.

When do you think that your company will get full utilization of this system?

Months, hopefully. We are going into the most busy time of the year for us, so we will not be able to develop or train anymore. We will use the system as it is for now, and reopen new training session after the summer.

### Appendix 9- Transcriptions: CFO, Husasmidjan (06.05.15)

The interviewees starts introducing the purpose of this interview, and what we aim to address.

So, you are the project owner?

Yes.

What is you work and educational background?

I have a master's degree in Finance from Bermingham Business School, and a bachelor degree from Iceland.

How long have you worked for Husasmidjan?

Since August 2014. Before that I was in an investment company among other things

What was your role in this project?

I am the CFO of Husasmidjan, the project leader at Husaasmidjan was the main figure in the implementation of the system, and he is in the IT-department, which is a part of my department it was basically through that. Of course, I have a lot of other responsibilities also. I think it was very crucial to the project to have a man like the project leader (Husa) who just own and just things about the project.

Who initiated this project? Why did you do this?

Of course since I started in August, I came into this project after it started, but we had an old ERP system t hat was very old (CONCORD-system). I think Microsoft stopped servicing it, so we were forced to do an upgrade. With new Windows all things were difficult. It was a sense of urgency.

Everybody agreed that this had to happen? No resistance?

There is always some resistance, but I think that all knew that the old system had to be changed.

You said some resistance, what kind of resistance did you experience?

People ask questions about the new system and compare it to the other, older system. "The old system was able to do that, why is not the new system able to do that...?" after the fist month there was some managers that wanted to turn back to the old system.

What was done to overcome this resistance?

Basically, we just said that there are no options; we are sticking to this change. It is very funny because there is this graph I use, if you Google change management! The model illustrates that in the beginning people are very happy and after a while people turn desperate in the process before it eventually goes up again. I would show this graph to everyone, and tell him or her that we are here now, but it will become better.

Did you use any theoretical models?

No. What's important is just to try to keep everybody updates and some feedback on what is happening in the change process.

How did you give feedback?

Each Monday I send everybody an email, this is happening now etc.. and a more detailed list to the managers. Just so people would be updated on how we are doing and keep everybody informed. People always want more information rather than less, but it can be very difficult. It is difficult to send these emails, because there are not always changes from each week and then it is black on white that there have been no changes at all.

Did you know anybody from Annata before?

Not me, but the project leader at Husasmidjan knew someone. I did know the project manager from Annata, we have had some communication in my previous job. He was at the company as well. Didn't know him that much though.

Do you know if Husasmidjan has used Annata before?

I don't know, I don't think so.

When did this project start?

In the beginning of 2014. I am very unsure. Possibly late 2013. The contract deadlines were in February 2014

Did you have any communication with the consultants or was everything through the project leader (Husa)?

Me, the project leader at Husaasmidjan and an IT-guy we worked as a team. The project leader at Husaasmidjan was testing the system, I was not that into the system but I was looking at how to prioritize task. We need to finish this and this before we do that and that. I think the three of us worked very well as a team.

How would you define the communication style with Annata?

It was a little bit for both. We had a very good documentation around each project, also we sat with them in a meeting and went through what was happening, and that was formal and structured, but just speaking to them about the project was very informal.

We did do a formal 1 page just to describe the project if we changed something for example.

What other people were mostly engaged in this project?

The IT-guy very much engaged.

What was his role?

He is very good with SQL and stuff, and was mainly moving data around. He is a data-guy.

Are you comfortable using the new system?

Yes

Is it working well?

Yes. I have used similar system before.

Was it any problems along the way?

Yes a lot of errors in the system. And also we had difficulties with the retail store system. Discount trouble and we also sales things were also troubling.

What do you think is the reason for these problems?

It is difficult to say. I think definitely a mix of both Annata and Microsoft. It is very difficult to distinguish. There are a lot of things in a standards solution like this.

The cashiers are very slow. That's just a standard in the system, we are trying to speed it up.

Are there many complaints about this?

This is the part that receives the most complaints.

Are there anything that Annata could have done differently?

Maybe they just had to be more programmers that were capable.

Do you feel that they have a lot of knowledge about the system?

A few of them have. The retail guy (responsible for the retail), does not have a lot of knowledge. He was trying to figure it out while he was there. Then we had a very qualified guy look at this. We definitely had some problems with the retail system.

Have you told Annata this?

Yes.

What happened?

Nothing, they tried to say that the retail-guy was receiving information from another guy. But that was excuses.

When it comes to the training, did Annata train the key users here?

No, that was actually very bad. In our opinion we though they would have some material to hand over, and they pointed back to us that if we wanted to make the material we had to do it our self. We did not have the resources to do that. In the end we did a little bit of both. We did the training and they contributed some.

How did the training take place?

Not ideal, we had a classroom here. We had some of our in-house people training others. We do not have many computers here, so people looked at others screens which is not a very effective way of learning. Of course its gets very in-depth people can get out of that.

Who's fault is that? Why did it happen?

It happened because Annata should have handled this. I though they could have some classrooms and do the training. I have experienced that in another projects (consultants trains).

In regards to the training, the consultants company did not meet your expectations?

Definitely not. Manuals were no-existence and we had to make them up our self. I think this was very bad. Instead we ended up with some form of education, that was not good enough but we did just do it to calm the people. So that people would feel that there was some training. We couldn't just go live without people feeling that they knew anything at all.

Poor knowledge transfer?

Yes.

Where there any project status reviews?

Yes. We were very good doing this in the beginning of the project until the go-live phase. But then we started and what happens is that we get much more errors than we expected, all the resources just went into fixing the problems. We are picking them up again, we do not have this system.

Who were responsible for these meetings?

It was Husasmidjan. Prior to the go-live we had to sit down and go over the project. We put up a wall and we had yellow stick that illustrated the status of the different aspects of the project. This was suggested by Annata. Not a very good system, but it worked. They have done this before, so I just accepted it.

Was the project leader (Annata) leading these meetings?

No, both programmers and us we met and told each other what we had done. Its basically the same as Trello. Its easier to keep track of what people are doing.

How often where these meetings?

One prior to the go-live.

*Is it normal to have three go-lives?* 

Yes. We think it was a good idea. First the retail, and then the warehouse. But it seems like it did not spot the difficulties. They were very happy, so we went for it.

When you have this go-live, can you tell us what happens?

For example, what we did is that we said that we did not have go live date, we did not have a start date and a end date. We just kept on going. And then we had both the old system doing one thing, while the new system was doing other things- at the same time. Next year we will probably have just the new system. If we had just deleted the old system we would be in much more trouble than we are now.

Where there both programmers and business consultants from Annata? Do you see a difference between them?

Yes very much. The programmers are of much more value. Because they are just fixing problems.

Are they easy to communicate with?

We speak just directly to the programmers. They are in the same room as us. Also we speak with the consultants. They can help with some set-up and such, but they do not solve the actual problems, but they can use very much time thinking about problems. And then they have tell the programmers to fix it. Personally I do no see great value in business consultants.

In terms of internally change in Husasmidjan. How do you keep motivation up and still geared?

No we did not have anything like that. It's a good idea. We are working very well together, there is no force like that. We try to inform people why people do what they are doing.

What kind of business culture is it here?

In the beginning I though it was very different than other places where I have worked. I though it was very formal. Now I think that people are very light and good culture here.

Would you have used Annata again?

Yes I think so.

So you are satisfied?

Yes. When I think of some of the programmers they are very good.

The Microsoft AX also?

Yes. What is very important in an implementation like this is to be positive because its so easy to be negative. I took the role of being positive. I have been in meetings with management, and everybody just hates on the new system, but it is very important that the management keep positive, keeps the eye on the ball. Don't hate what you cant do anything about.

Was that something you focused on at management?

Yes. Think about what you can do to make things easier. I did some pep-talks.

We had ta meeting where we called in all employees in the Reykjavik where I did some pep-talking. As well as in e-mails. I told them that we were getting closer to the target, and try to stay positive etc. If everybody goes down, the ship goes down. It was not planned for me to take this role, but when I see other people stagnate I felt the urge to do something.

This project, how did it influence your daily tasks?

Definitively takes the focus away from normal tasks. And it still does.

As a consequence of this project, did you have to stay longer hours?

I stayed longer hours, in March I went home at 18, and at 21 I had the computer in my lap again. April also. Now I think its slowing down.

What do you think will happen when Annata leaves?

We are trying to figure out now. But I think we will manage without them. It will be fine.

So you think you will manage the system your self?

We will figure out how we will do it with setup, and maybe some new employees etc. But I think we will manage it well.

Do you think that you will not be dependent on Annata someday?

We will definitely have to keep a task list over projects we want to implement. There will always be some connection with Annata. Maybe next year we will not have contact with them.

Annata does not provide any support-service, right?

No.

Is this something you would have appreciated?

Have you said this to Annata?

Yes.

Yes definitely.

What is their response to this?

No, they do not do that.

What about the option about hiring someone to do that: more It people for example?

Maybe, but we have had this employee who has come in here and assisting the system and also doing some manuals, and we are thinking about keeping her.

Is she from Annata?

No, she is not. She is from Husasmidjan, she is working in the retail, she is a very good employee. She knows everything that is going on in the cashier.

So it is not normal to keep the external consultants?

No, I do not think that is very frequent. I am more worried that Annata is trying to get hold of the project leader (Husa).

*In your opinion has the project been a success?* 

Yes. It has definitely been very difficult to (???), but I think in the end it has been a success.

And we are getting closer.

Has the project been over budget?

Yes. But not very much, we were hoping that we would be on time and on budget. We are on time, but are going over budget. We are also disputing some invoices to Annata.

Do you feel that Annata has shared all their knowledge, or have they held back?

I think that they have given us everything they can, but there is also some advices/things that I think have come into the project and some of the consultant were not willing to face the problems even when they know what the project is depending on this. They have in a way postponed the problems.

For example, I said "is this suppose to be like this?" The answer, "yes everybody ask the same thing". And then I though to myself, if everybody ask the same question, why hasn't it been done anything?

And also the training. I think that was difficult for Annata, because they did not have any materials to give us.

Is that Microsoft or Annata's fault?

Microsoft does have some materials, but they are too many pages, but we need the basic function, presented to us in a way that even the end-users understand.

#### Appendix 10- Transcriptions: End-user, Husasmidjan (06.05.15)

End-user at Husasmidjan from Accounting department.

How many are you in your department?

Four, three like me and one team leader. The CFO is my boss. We are twenty people in the accounting department.

We are interested in knowing how you have experienced using this new system?

It has been good and bad. Many difficulties because its difficult to do new things, because we think we are doing it the old way. We have difficulties seeing that the new system is doing the same thing as the old system. We are not experienced in the system, like a pro, so we have to open many new windows before we find what we are looking for. And this is not very efficient.

How have you been introduced to this new system?

We have been in meetings: before we got the system, so we just saw a test of it on the screen. We did not try our-self. It looked good on the screen, but when we god the system it was very difficult understanding how to use it.

Did you get any training on how to use the new system?

We got an introduction first, but not as a team. We all have different roles, so it might be difficult to coordinate different training for the different modules and roles within the team as well. We got a general training in how to use the system. How can we search for things etc. She was telling us how we can find things etc. which everyone can use, but in my case, because I have a different role and doing different things in the system. Then there was one consultant that came to my department and though me how I could use the system. She sat next to us. She is still here, but she is not here everyday now. But sometimes she comes by. She shoes me physically how I could to things. We also got the manual. The system made the manual from the consultant. Very large manual, we could not use it. We did it our self. They did a very good job. Many staff who was trained to teach the others, and they made a file at the intranet, where you could search for what you needed. They also made a video. Where they showed us what we could do. I did not have to use it, but I heard others were very happy with that. They though it was easy to use. Very effective for the retail-stores users.

What do you do if you have problems?

Right now we are trying to make the invoice-process electronically. I am working on that. There is just one guy, from Annata, who is helping me. He is trained to do everything. We email. He responds quickly. He is still here

(present). I go directly to him. He is the only one, who knows this system. She sits down next to me and watch me doing/teach me what to do. Very nice.

Do you know if your colleagues are as satisfied with the training as you are?

No they are not. I think the system is not doing what the old system did. The two systems are so different. The new system has been very slow, which is very frustrating.

In your experience how many are satisfied?

50/50. As the days goes by, the system gets better. But I think it slowly gets better.

You go strictly to the consultants, does other have the same opportunity? What do they do if they have a problem?

I know that there is this women who answers calls, she is specialized in retail-stores. She was both in the stores, and here (house).

What do you think will happen when the consultants leaves?

Well, I don't know. I don't think they will leave before everything is smoothly.

Approximately, when do you think that will be?

First of March we started, then I though to myself, 1 of June its going to be ok. Now it is May and its many things that is still not ok. It might be ok with me, and I can see the light. But I don't work in the store. There is a lot of trouble there.

Would you be comfortable having an IT-consultant here or an IT-expert at Husasmidjan full-time?

I think in the long run Husasmidjan will handle this by them-self.

Its more what he is doing in the back, the programming we cannot do our-self. When that's done, we can handle it our-self.

Did you see that it was necessary to change the system?

The old system was too old. Nobody could help us when something went wrong. The licence was expiring. It was very necessary. If you are talking to another company, friends of mine, they have an older version of AX, but this system can do things that the new system cant do. There are many modules that needs to operate at the same time, we are a very complex organization.

How do you think management has handled this situation/change process?

They have informed us weekly with email to everyone, just telling us what is up. Often it is about the warehouse, and that does not matter to us. That's very important, because we know what is going on. People always want more information rather than less, but it can be very difficult. It is difficult to send these emails, because there are not always changes from each week and then it is black on white that there have been no changes at all.

Something is happening, and even though I cant see something at my department, we can see that something is happening. There has also been meetings here, in the canteen, we also invited the bosses from each store., there have been slide shows. Four times a year. I think it has been two times since January. Much talk about the new system.

How was your relationship with the consultant?

He is my best friend. We email 14 times a day. I trust him. He is very calm, and I know he has many problems to solve. But he always answer my emails, he always takes the time to answer me. The other as well: we email her, she writes down all the problems and takes it further. Sometimes she comes to the department. She are also present in all departments.

Has the project increased your working hours?

Yes. This makes me tired sometimes, but when I see things working I just want to finish. I am still motivated.

Was that you choice?

Yes I can do what I want. I have a dialog with my supervisor. We have always agreed upon this upfront. Sometimes I have talked about this, just done it. If things are working well, I just stay and finish. Does matter if I stay one hour longer.

You think eventually that the project will be a success?

I think so. But I do not work in the warehouse/retail. There is a lot of problem with Toll and Tax.

Do you think that the consultants understood the organization?

I think they were supposed to do that. But they did not do that. The new system, is not the same as in the old one. I think the consultants realized that too late. I think its harder because we have the newest system, AX 2012, but my friend in another job has an older system which is very good. Maybe they just gave us the newest, without thinking it trough. I do not think that we are doing anything wrong, but that the system does not answer to our needs. I was not working here when the old system came, but those who did told us that it took 2 years before they were happy with that as well.

I think that's too long to wait before full utilization. It can explain why it takes so long between each time we change this system.

### Appendix 11- Transcriptions: Project leader, Annata (07.05.15)

Introduction of the theme and purpose of this meeting

The theme is very interesting, because in many cases it is very difficult in projects. The human factors between clients and consultants are possibly the most challenging thing in projects. The project that you picked is quite difficult and we have many challenges, both technical challenges and challenges in regards to communication. So you probably have heard the other side as well. Hope that the other party's version was not too harsh on us. At least, we are still talking together, so I think we are good.

But, it has been very difficult, very challenging.

Why is that?

Wow, many things.

Maybe we should just talk about the project

Ok. Do you know all about the project?

Not that much. Some.

Do you want me to tell you about what we actually are doing? The modules in ERP systems.

We are very interested in finding out what happened at different phases, for example who contacted who? Just start from the beginning.

Actually, I did not work here at the very beginning when the first contact was made. But, it was more than two years ago. But, in the very beginning I think 2 or 3 IT-consultants were contacted and asked to participate in a tender process. I think at least two consultant company's finally being talked to. At that time only two or three constant company who has experience with the Microsoft AX solution. So the two biggest ones were involved from the beginning. Firstly we went over the requirements and we did a demo session. We introduced our self and how we plan to solve the requirements. Husa had a long list of requirements in excel. And after the demo session, there was an informal bid. After that they started discussing with us and not the other IT-consultant company. I think that they liked us better than Advania after the demo-session and the introduction.

Advania had a different system to offer?

They had the exactly the same system to offer. But I think Husa liked the persons at better. I think the price at was higher in the beginning. We had to lower ourselves a little down. Because they wanted to go into the collation with us rather than Advania. It might be a bit of a history there, which can have influenced their decision. Advania went into a couple of projects before this project, which ended up pretty badly. They had a lot of difficulties, even though the projects ended up going live. They had difficulties, so I do not know all the details but Husa wanted to work with us even though our prices were higher. So we had to reduce our price in order to work together.

After that we started to formalize the project and started doing diagnostics. What that means exactly is that Husa had a list of requirements and we sat down with them and we reviewed how they did their processes today in their current ERP system. So we kind of sat down and they showed us how they for example purchased an item, and then we had to go back and review our answers to all these requirements. This process kind of went back and forward.

Do you want to know more about the process, or should we dive into the project?

After this process, it took a few months, we kind of reviewed our offer, and some of the requirements, we had to change them, and the answer to them. To say that previously we thought this was standard. But now after discussing it with you we know we have to do some customization to it. So we put more hours on that one, and then we had to say that, ok. We thought this was a customization, but now I think we can solve it by the standard methods in the system.

Do you know why they ended up with the 2012 version and not an earlier one?

That was the newest version. And actually Microsoft does not allow us to sell older versions than the newest one. So we are not allowed to sell older versions of the system. They are forcing the new version in to the

market. But this is not always a good idea, because the 2012 version is not the best one. It has a lot of flaws. And that is one of the reasons we have difficulties in the projects. Also the 2012 versions came with a lot of new things, like the warehouse, which we implemented. And that was good. That is another new solution in the 2012. Which had a lot of bugs in it, a lot of difficulties. Also the retail system for the POS (product sales) which is just a retail system you have in your grocery store, you know with the touch screens. That is also new, in 2012. So they were kind of releasing a lot of new modules, a whole bunch of new modules in 2012 system, and that also gave us a lot of problems. So that is probably also the main reason why they wanted 2012 and not 2009, because they had the opportunity of using the new modules. So after the diagnostic process we reviewed our implementation schedule and contracted it. And the contract was limited in few areas. We had a target price. Lets say the target price was 5000 hours and in the project before go live, if you spend more than 5000 hours we get a reduced rate. So before we were charging 15 000 Icelandic kroner, but if we exceeded the 5000 hours. By the way these are not actual numbers. Then we would have to reduce our rates maybe down to 12 000.

For the excising hours, or for the exceeding hours?

No, for the hours exceeding the 5000 hours. So this was built in the contract, in a little bit more complex manner, but this was one of the things that we had to make do with in the project. And that was ok, the project actually did not go over budget before go-live. Which was very good. So in January 2014 we started to put it.

And when did you start working on the project?

I started working on the project in September 2013.

So a half year before they started the initiation?

Yes, the initial contact, but I stated at the beginning of the diagnostic process. So I was with him for the whole time basically, but I was not in the presales process.

You were project leader for Annata?

Yes, I was. Then we started the project and we started by creating a solution, or implementing a solution called ORS. Which is an online retail store solution from Microsoft. Which was supposed to be part of 2012, of the AX 2012. And in about five or six months we gave up on that solution. And we had to talk all the costs.

Annata had to bear the costs?

Yes, Annata. So we basically refunded Husa.

But why wasn't it working?

Technical problems with the solution, and we now know that no one in the world has actually managed to implement this. We have no examples.

So it is Microsoft fault?

Yes, basically

But Microsoft does not refund you?

No, but we are trying to get our money back. But I am not optimistic I have to tell you. It is absolutely terrible. To release a product that is not good, and is not in a very good state, and we complained a long time with Microsoft before we stopped the product. That actually could not be implemented. So that was the first bad thing that happened in the project. But we kind of took the big bang there and refunded all the money, which was spent and paid us for implementing this solution.

This was supposed to be a part of the ERP system?

Yes, and it was a wonderful idea actually. Because this is a standard way of communicating from an online retail store to the AX 2012, and this is always difficult to write a interface between a webpage and a standard system, so it is always very costly to do that, complex and a little bit brittle.

So did you end up using another system?

They ended up asking local IT company to build a new webpage. And I think they wanted to put this in the air now in March I think, but it is still not live. I actually don't know what is the status of that project. We are not handling that.

So you are not handling the retail?

Not the online part, but the POS, which is the retail system. We are handling that.

The online store is handled by somebody else?

Yes it is. When you go online and want to by something online. So another company is handling the creation of that webpage.

Does the purchase from the webpage, is that integrated in to the AX 2012?

Yes, it is integrated into the AX 2012. The system actually used to be called Axapta. So a lot of people just call it Axapta. But today it is called The Dynamics AX. And the version is 2012.

So you had to handle the integration between the web page and the AX 2012 system?

We gave them a little information on how to do it, but they are actually handling it themselves. We have a database where they are communicating with, and delivering data there. It is actually the AX technically is exactly the same way we would do it with our solution, but it is just Microsoft, so it is just coming from a different webpage, if you understand. So we have the AX system here (points to a coffee cup) and then you have the database here (points to a water bottle) and we were originally going to talk to that database and that database was going to sync with the AX 2012. But they just have a different web page now, still talking to the same database. So that is quite a nice solution. Because there a standard communication methods that we are using between here and here. Build ins from Microsoft. Hopefully that works. This was the first I guess difficult issue in the project, so we had to handle this with Husasmidjan, and people being very annoyed with this and the cost of everything. But we managed to get through this.

Where there any other big issues?

Not at the time, at the same time we were also implementing the POS system, which is the point of sales system in the stores, and we went live with two POS, I just call them POS. The actual box that went in to the shop, we just call it POS. So went live with the POS in January, only two, in one Husa store to test it, and that was in January 2015. From May 2014 until February 2015 we were also working on all the other modules, that is the warehouse module, HR, purchasing, not payroll. They actually have a separate system for that. A separate system for the Icelandic market in our system. We decided not to create that one, because you have to completely build a new one, because the Icelandic market is so different from all other countries. And that is probably the same with every other country in the world. You know, Denmark is probably different from Norway, and so. At some point we decided not to build this solution for the Icelandic market, we will just let somebody else do it. And then just interface it with all of our systems. And that is fine, we are happy with that. It is the same with the custom system, when we import good from other countries. We decided not to build a custom system for the Icelandic market. So Advania did that and we just sell their product. From our competitor, so when we are implementing the new system, we just say: "ok, we can offer the custom system from Advania. And they do all the development on that and we are just seller of the product. Like our partners are selling our products, like in Chile.

There are no hard feelings because you got the contract?

No, and we actually talked to Advania about this. And there are no hard feelings from their part. We are competitors, but we can still talk together. And we have no problems buying their solutions, it is fine for us. We just let them own that, but it is a bad solution. It is not really well coded.

What is your background, in regard to education and prior workplaces?

I have a bachelor's degree in engineering. And a master's degree from Glasgow. The University of Glasgow, I'm a civil engineer. So I did my bachelor's degree in project management in the civil engineering. So it is called construction management. Then I worked in that area for four or five years in project management, and then I decided I did not want to do that anymore. I did not find that very interesting. S I started working in the computer section I guess, working as a project manger in the consulting business. And I worked for a local company here on Iceland called "?Nihiri?" for nine year in SAP consultancy and product management. It is now well, one of the biggest systems in the world. And then I joined Annata two years ago. So I moved from the SAP world, into the consultancy world. So I am not heavily into the system. I don't know a lot about the system. I do not know how to configure it, and I have not been working at all like a consultant in the Microsoft system. I am just a project manager now. But in the SAP system I was working as a consultant and a project manager. But this really is not the best set up. You do not want to have the same person doing the project management role in a big project and also having a consultant role in the project. It is difficult to combine these two worlds. If you have a big project you really need to focus on the project management part and the consultant part. I have seen this happen many times, you start ignoring the project management part and start to focus all on the consultant part, and this kind of gets left behind.

How do you define your role as a project manger? What were your responsibilities?

The responsibilities are first of all to make sure that everyone knows what they are doing. I am in charge of all the plans, and that the deadlines are met. Furthermore, I have to make sure that the customer knows the status of the process and the project. The milestones.

How would you communicate the plans and the milestones?

Well, with the milestones we have the project plan. Either we use Microsoft for the project or sometimes we just use excel. I have templates. For various reasons it is mostly because it looks very good, but Microsoft project looks terrible. It is terrible to print I out, but I use both. It depends on what I am doing.

And then you have a meeting?

Yes, we can have either a regular meeting once a week, we had a meeting once a week with the client at Husasmidjan in the first half of the project. And in the last half of the project we kind of switched over to SCRUM. So we met every day, every morning for 15 minutes.

Who did you meet?

I met the project leader (Husa) and the IT-manager and sometimes CFO too. And our team was also present, and we had the board, with all the requirements which were being programmed. Basically everything that needed to be done in the project. Even just simple things like meeting somebody or something like that. And then we had this kind of (???) report on the wall. And this is displaying the status of all the projects. That is the daily communication in the project, and of course we have email, meetings and notes, and stuff like that. And we had a webpage, did you see that? Did the people in Husa show you that?

Yes, we talked about it. But they did not show it to us.

Do you want to see it?

Yes of course.

Ok, I have it here. (In this part of the interview the consultant is displaying the different functions of the SharePoint)

It might be interesting for you seeing it. So this is a SharePoint webpage, which is Microsoft. And the ORS was actually built in to SharePoint. The one that did not work. But SharePoint works for this very well. So this is just the front page, this is in the cloud which is the newest buzz-word in the IT-world. This is hosted at Microsoft online 365. Which is in the cloud, so you can access this from anywhere. And this is just the front page, we did not actually use this a lot. This is just the news feed column, we did not use that much. These are the forms we had here and the IP numbers of all of the servers that we are using. And then here on the left are the typical documents folders for everything in the project. That is where we store all the documentation in the project.

What kind of documentation?

At the top here we have a form for development changes, they are all marked with a number. So lets say the project leader at Husasmidjan wants to add a requirement which was not in the original list. He will just fill out this form describing what he wants, and we would then subsequently take this form and create a development FDD, which is a functional design document which describes how we want to solve this requirement. And they are all marked here with a number. And if we go into one of them, this is a very simple document. A short description of what they want to do and how we want to do this, and this was relatively easy to solve this.

Who at will do this as well?

The project leader from Husasmidjan will issue the form from Husasmidjan and a consultant from our side will do this document, and if required he will ask a programmer to create a schedule and find the time necessary. Then the will receive this FDD and say ok, I am fine with spending four hours on this programming change and then we will create a task in the task list. And this was what A35, this is the task, and the module is purchasing. This is assigned to somebody, priority and task status, and here will say ok, I want to approve this. Or somebody else at Husasmidjan. Then he would go in there and say, ok, this is approved and he would never send us an email, because he will just enter the Sharepoint and see that the FDD is approved and then somebody will assign it to ?? or in this case Linda and would assign this to Linda and she would receive an email, saying this has been approved so you can just start.

Can you just assign tasks to everyone?

Yes

So there is no function like, now Ellen is overloaded with tasks?

No, this does not take say if you are overloaded or not. There are no hours or anything like that. So we would have to control that elsewhere, but it could probably be done there, but we did not do that for the project.

But it worked?

But we used the wall, the SCRUM wall. So you could see if Linda had to many issues in her hands, then perhaps we could move it to somebody else, or prioritize it differently. We could definitely move some of it back to a lower prioritization, because we would just mark everything with a red dot. If it was something we wanted to have a high priority on.

Do you think this has worked well?

Very well, the system worked very well in the project. The system worked very good.

Do you use this system with many of your clients?

No, I have not used this kind of webpage before I started working here with Annata. The tool simply was simply not there at the other place I was working. So we used other methods to communicate.

Do you think this is a good way of communicating?

Yes, it is a great way of communicating. Everybody has access to this webpage, from Husasmidjan and Annata.

Even the end users, or only the key users?

Key users, some time regular users. We just admit them, and we can control what everybody sees. But it is mostly open. The only thing that was closed was the project management folder (points mouse to the folder). Because they have meeting notes from the steering committee. And sometimes something is debated about the hours or cost's and things like that. And they have no need of knowing this. You really want to keep things aside in the project management from people who are working on the project and people working from the client, because one of the huge tasks in every project is to make everybody happy and making sure that the morale in the project is good. So when the project leader (Husa) and I are debating something about money you can never let everybody else know about that. We always have to come out smiling. And that is also true about the management at Husasmidjan, we are now moving into something completely different, when you are implementing a system like this. It is very important that the management part of the client is always optimistic against everybody, even if everything is going to hell in the project, they always have to make sure that they have good face and taking up the project, because if the end users and the key users are loosing faith in the project because it is difficult then there is almost no way back. I mean it is very difficult to get back on track.

Is that something you as a representative from the consultancy company communicate to the client?

Yes, the project leader (Husa) and I discussed this early in the project, and probably once or twice during the project. We discussed that the key user and management need to have a good spirit and good morale. And we had a very difficult ride in the project, and we are still experiencing some trouble. So in this project it was very important that they kept up the good face, and the good morale. And also because it was quite a long project it requires a lot of stamina.

How do you think the management at Husasmidjan handled this

It is a bit difficult for me to say how they managed their own people, because I was not always there. But I believe that they kept up a pretty good morale. I think they realized they had to do it. I think the CFO realized it, and the project leader (Husa). And they managed to keep up, even through very, very difficult times working almost twenty-four hours a day they still were trying not to loose their tempers and be positive. So I think they did a pretty good job. I hope they did. But this is something that is quite difficult to control. But of course you have to say it out loud, you have to make sure that everybody knows this and remind people of this. It is probably something that you could do better in every project, but this is something you just have to work on. So the relationship with the client is one of the most difficult things in projects and the most important, because if you have a bad relationship between the project management of Annata, or the employees of Annata and the customer is starts to get infected within Husasmidjan too. Because if we are not talking together, they definitely wont be positive within their own organization.

How was your relationship with the project leader from Husasmidjan?

It was very good, always very professional.

Did you know him or had you worked with him before?

No, I did not. Neither have a worked with him personally, but he had worked with some people here before. So he knew Annata. He was hired especially for the project. From Annata's customers. So this is probably I think the second or third implementation he is going through. So he is quite experienced with the implementation, but his first time as a project manager.

How did you get to know the project leader?

Just by meetings.

There were not any informal meetings, like coffees first?

Yes, I guess in the beginning we just met by meetings, but slowly, as the project was getting more intense, with more hours then we started to be a lot more at our partners side. So, me personally started meeting him just at regular meetings and of course we would always have a little chat after the meetings. But in the second part of the project we would meet everyday and sit together all day. So you get to know each other. There was a lot of communication.

In the first phase of the project, when you were trying to clarify Husasmidjan's needs and requirements, how did you do that?

We had a formal process for that, this was the diagnostic process.

Who was involved in this process?

The consultants that went to work in the project participated in the diagnostics process. And they were observing Husasmidjan. We set up a huge meeting calendar with every module, like purchasing, sales and finance and then we went through the process. We had a whole day where the consultant was sitting down with the key employees at Husasmidjan. The first part of the day was the key employee at Husasmidjan showing what they were doing in the system, and just going through the main processes in the system, and the consultant would sit and observer and take notes on what the new system needed because it was not already there in the new system. And then on day two the consultant would show how we planned to solve things in the AX 2012 system. So we were trying to pick up things that were missing in the original requirement list, which was created by Husasmidjan. And I think they did it completely themselves. So in that situation you have Husasmidjan saying ok, these are the requirements we have based on our current system and on what we want to fix in our current system So, when we do that they often miss things which they think is completely natural in the system. You know, they think it is so certain that it is a standard in the new system that they don't even mention it on the requirement list. So that is what we are trying to pick up in this diagnostic phase, and we had a lot of new requirements after the diagnostic phase.

So the client does not necessarily know what he wants or what could be better?

No, he doesn't. But he is not a specialist on the implementation of a new system. He is a specialist in selling timber. He does not implement computer systems every day. And hopefully he does not have to do it again before another ten years.

So you had a lot of additional things that you could add for the client.

Yes, there were many things we could add a lot of requirements after completing the diagnostic phase. (The consultant is showing the interviewers the SharePoint webpage and pointing at the requirements that were added) So here are the requirements that were added in the diagnostic phase in the project itself. So that is a process. What we probably didn't do well in the project is that when we started working on it, we were to focused on the requirements so we basically saying: "ok, we did not miss anything in the diagnostic process". So we just started working on the programming and all of the requirements and we did not put enough effort into looking into the process itself and the consultant sitting down with the key user again, and going through everything in detail. We know that now that we did not spend as much time on that in the project as we should have. We know that now. Also testing was not good enough in the project, and that was partly explained by a lot of time pressure. We were all so focused on going live on March 1., because the high season of Husasmidjan starts in April and May. And we wanted to run the system for one month before the high season came. So I guess we kind of skipped too much in the testing area. So we found a lot of bugs after we went live. And that would have been ok if the POS and the warehouse system would not have been in such bad shape. We did quite a bit of

testing in the warehouse system, and quite a bit of good testing in the POS, but still we did not see all the bugs in the POS system, and the warehouse. Which is kind of frustrating.

Do you think if you did not have this time pressure, that you would have done more testing and found more bugs, and that the go live would have gone more smoothly?

Yes, but I am not sure about the warehouse though, because we were running the warehouse for one or two weeks and it was completely fine. But after that it started building up some errors, which we found at that point. So I am not sure that more testing in the warehouse would have given us all these errors.

And the retail, would that process have benefited from more testing?

Definitely, if we had good testing in the retail part we would have found a lot of errors. Definitely. So this is something I could have told you before the project, that testing is really important. But when you are in this, you get really busy, and you start ignoring things and that is never a good idea.

Could that have been handled by greater planning, like you starting to use the SCRUM earlier?

I think the one of the biggest mistakes on the project was to not give somebody the role of being the test manager. Somebody that would have grabbed that role and made everybody test very well. That role was supposed to be created but it was never, so that could have contributed a lot.

Could assigning time for ad hoc and extra time for the development of new requirements have helped in regards to the problems?

No, I don't think so. I think everything about the requirements, as soon as something came up, and of course we did some testing. We had the resources to deal with the new requirements. We had the resource problem in the programmability. Both from our side and from Husasmidjan's side.

So you did not have enough programmers or consultants?

For a long time we did not have enough programmers, so we were programming too slowly. We were solving requirements too slowly and that and the job that we went live with still a few requirements missing. Well, ten, twenty requirements, not all finished. And the customer did know that. He was completely aware of that. But our decision was to go live despite that because they felt that was ok to go live without them, we would just finish them after go live and implement them then.

Is that the customer's decision?

Yes, it was.

Was it your recommendation? Or would you postpone the go live if you could.

We would have liked to postpone and finish the requirements. But it was ok. No crisis. But it is always the customer's decision. And they had a formal meeting with all the management at Husasmidjan discussing this and then they decided that they wanted to go live. And that is always the process. It should always be the process. It is never the IT-men who decide this. Because first of all we are not permitted to do it, and second of all we don't want Husasmidjan to say "hey, you told us to go live" and then it be a failure.

We have some questions in regards to knowledge transfer. Especially the training part.

Yes, this was something that was lacking a little bit with this project because of pressures. And training started a little bit too late.

How did you train the employees?

It is a method we use, which is called "trained the trainer". We had a person at Husasmidjan that took over the training.

So Annata taught one person in Husasmidjan, and that person taught the others at Husasmidjan?

Yes, they have like sixteen stores, we can't teach everybody. We cannot teach and train everybody at every store. So we had one person from every store and come in for a seminar, which was either held by super users at Husasmidjan, so they were actually teaching themselves, or they were trained by other personnel. They had the seminars for maybe one day or something like that and they were shown the system.

Were they given any handbooks or manuals?

Yes, but very simple manuals. The system that we planned on having in the project was that Husasmidjan, and it is always like that, that they created their own manuals. The super users, they are involved very early in the process, they start to know about the system, they start to learn it and then they create their own teaching material. We can never use the same teaching and training material from another project in a second project. We have no general material, it is very difficult because the processes are always so different.

Was Husasmidjan aware that they needed to create their own handbooks for the system?

From the beginning it was clear, but we started way too slow on this. I think also they were very busy, the super users at Husasmidjan. We were too late assigning this role to someone within Husasmidjan to organize this, and everybody was very busy and we started to late. So we ended up with users which weren't too good in what we are doing. And when we add all of these problems with the POS and later on in the warehouse then it became very difficult. Very difficult. Husasmidjan was always asking us "can you please give us some training materials". In January, 2015, and that was way too late. And we don't have any general manuals. I think they know it now at Husasmidjan, but they said "you must have some general manuals" and we replied that we don't have it. Not something that you can use at least. And they were always a little bit surprised by this. But I think they understand now that it is impossible. And then we started creating some training material for them, but we had very little time to do it. So they were very simple. And then we handed them in, and they started to use it, and then they very quickly saw that it was not the right process for them. They were missing thing, and telling us that we need to put a check mark in this box here before you continue with the purchasing, and this is something we did not know because we were not using the system, but they knew that. It was just a standard feature, but we simply don't know the process. So this is why customers need to do this themselves. And also they learn a lot about the system when they create these manuals and teaching material. It is very important, because when the super users sit down and actually have to do the training material step by step they learn so much and there is so many questions that are raised and they take all these questions to us and say "what about this, and what about that and why is this like that?". So it is a huge learning curve to do the training material. So if you plan it in advance then it is very beneficial towards the customer for him to do it himself. And it is very expensive if they ask us to do this because: first of all, they would not learn from doing the whole process, and second of all we would have to sit down with them for each and every step and ask if this is how you want to do this. It is very expensive and the knowledge transfer is not good enough. So this came in very late in the process, and we started way too late. And that is something I will have to take responsibility for with the project leader (Husa). I mean we are project managing this project, but there are some reasons, it is mostly due to lack of resources and lack of time basically.

You talk about the training in the warehouses and the retail but what about for example one other module like HR? Was there specified training for the HR system?

The HR system actually went live in March 2014, which was the first module we did. And that is working very well. It were no problems, we actually completed way beneath the schedule. We only used about 60% of the hours.

But what about the others, has there been training there as well? Or is the training only focused towards the warehouse and retail?

No, there is training in every module, like the purchasing module, the sales module. The sales module is divided into two parts, we have the POS which is of course sales and then we have to do sales in the AX system directly. So we have the retail POS module in the store, and then you have just a regular computer with the AX 2012 system up and running. What the POS system does, is when you are selling an item you just bring it to the register and beep it through. And then it creates a sales order in the AX 2012 system through the database that I told you about earlier. Which is the same database which we use for the online store. So we are basically using the same channel. It creates a sales order in the system, but in some cases you have contractors at Husasmidjan who want to buy huge amounts of timber, and they will sit down with the sales advisor, and that guy does not use the POS, he uses just the AX 2012 system and he is putting in discounts and things like this. And he knows this customer, because he has been buying timber for ten years form him so he puts in a discount.

Why has there been more training in the warehouses and the retail services?

The training I think it is relatively easy to teach everybody in the POS, so I don't think there was lacking any training there. But in the warehouses there was quite ok training and testing there. But the bugs in the system was always creating problems. And when you have bugs in the system, the user stops believing in the system. So if you hit some issue in the system, you always say "oh, it a bug, it's a bug in the system" even when it is not and is just a user error. When you are in that situation, when you are running the system, which is heavily bugged, and everybody starts to blame the system it is not good. You loose faith.

How do you gain that faith again?

Well that is one of the biggest challenges at Husasmidjan, but we are slowly now fixing these bugs. For almost two months. And it is very difficult to get the faith back I guess, but the only way you can to it is to be optimistic. For the management at Husasmidjan to be positive is very important. And they are of course pressuring us a lot to fix the problems, and we are working really hard on that. That is basically the only thing we can do, is to fix the bugs as fast as we can and put it into a real life environment, and this has to be tested, because when you fix a bug you put it into a test environment and the customer has to test I very well because you don't want to put a modification in to a live system and it doesn't work properly. That is the worst thing. So this is a process, a lengthy process and the whole time the employees at Husasmidjan need to try to be upbeat. They have to make sure that they analyse every issue, because if they start to say it is just a bug in the system, and everything is a bug in the system. Then we first of all get to many issues to our side, which we then just have to hand back. Also, we don't really know what the status of the system is. That has been very difficult, just to know what we are doing, are we making progress with the warehouse system? So that has been very difficult also. And that is very human. Just keeping interactions, and keeping calm and be rational, keeping everything in order is difficult in that type of situation. When everything is just "aaaaaaahhhhhhh" (consultant makes a type of scream descripting chaos).

Do you think this is reinforced by you not knowing the people in the warehouse? And don't have any direct communication with them?

Yes, that is definitely the key. They don't know me either. It is just some program they are in. There is a too little link between the people in the warehouse and the consultant. But we had our consultant and the warehouse consultant, he has been a lot in the warehouses. There has been a very good link to him, but he is not a programmer. And he does not actually work in Annata, he was a subcontractor from another company. But he is a warehouse specialist. They agreed on implementing the system for us. So they dove in to the AX 2012 system and learned about it and implemented it at Husasmidjan. But all the programming that had to be done we had to do that.

When were they introduced?

From the beginning.

Are there any support services from Annata?

We have a support desk, but it is not a twenty-four hour support that you can call and get immediate help.

So when you leave Husasmidjan, as you see it how will they handle the support service, or will there be any support service?

Yes, they have a IT-support service from 48:10 Teickhi ??+ (unsure about the name). Which is another company. They have been for five or ten years I think they have been using them. And they have a hotline they can call.

They are familiar with the AX 2012 system?

No, that is the problem. They are not. They have been knowing this for a long time, and Husa has know this for a long time and that they had to fix this problem. And they have asked us to have a direct support service for them, but we don't want to do that. We are not in that business. This will have to be solved with ??Teichi??. Definitely. We will just have to teach them about the AX 2012 or Husasmidjan. It is a little bit of a difficult situation if I can tell you the truth. Because who is to pay for this? Because XX knows very little about the AX 2012, and they want to service Husasmidjan and we basically are not obliged to train them really, but we would of course like to help them. So, what we have done is to offer them to teach them a little bit about the system, and help them as much as we can on our cost. But not so much that we are spending days and weeks. I think the best way for them thinking forwards, thinking of ??Teichi?? is that they should just get to work and sit down with one or two employees down at Husasmidjan and just sit down besides of Annata and the project leader (Husa) and start to learn and pick up things about the system. Because like Anna is kind of their support at the moment. I don't know if you met her? She was the key user for the POS system, and she would be the perfect candidate to start teaching them a little bit. They will just have to do it themselves a little bit. But we can help them to move a long. But this is an issue, which has been talked about in the project for many months. So Husasmidjan realized this way before we went live, but did not actually do anything about it. ??Teichi?? did not do anything about it and we did not do anything about is. So we are today in this situation, and no one is taking responsibility for it. But this was definitely not our responsibility I think.

Has your company had similar cases to this project?

Yes, we have implemented the system many times before, older versions. We have been implementing the system is Iceland since 2002.

Has it always been difficult or this challenging?

Of course I don't really know, but I have heard that sometimes it has been difficult, but never like this. This project is definitely the most difficult project we have had at Annata, by far.

But has the experience Annata has from implementing the system in other companies been beneficial.

Oh yes, and older versions, the customers have been really happy. I don't think Annata has actually lost a big customer which is unhappy with the product or the service I think. So this is has been a very difficult process with Husasmidjan. And definitely the worst situation we have been in an implementation in a long time. But it is not, just this project that has been creating this situation, because we have had five go lives with five different clients here in Iceland and one abroad between February and May and this is absolutely ridiculous. This situation, it's controlled it was not supposed to be like that, it was not planned to be like that but we had projects being postponed and stuff like this and it all kind of crammed into a few months and the resource problem here at Annata has been huge. Really difficult, and that is part of the reason why did not have all of the resources into Husasmidjan. But we did give Husasmidjan access to a lot of resources. They were in most cases the first priority. Because it is a big project, and is very important.

How many consultants and programmers from Annata were working on this project?

I would have to count. I mean from time to time, at once maybe ten or fifteen people at once. At the top of it, but we probably had like twenty or thirty people working on the project at some time for the whole year. And that is more than half of the company. But still, only a few hours on some of them. But in the end at least ten or twelve people working at once sitting at Husasmidjan working day in and day out.

How do you see this project ending?

We are slowly moving towards fixing the bugs in the warehouse. And we had hopefully some breakthrough last week with the POS, because we finally had some resources from Microsoft come over here and he sat down with one of our developers for one whole week, looking at the problems and trying to fix them.

When do you think Annata will leave Husa for good?

We will never leave them for good hopefully, we will always support them. But for this project I am hoping we can close the project in the end of May, so that will be in three of four weeks that would be great. But I am not going to say anything for certain. It will definitely not be before that. But I actually have not discussed this with Husasmidjan yet, not in any detail. But in our last meeting we had some discussion about it, but no dates have been mentioned. But in order for us to close the project we have to finish issues with the POS and the warehouse system. And there is a list of like twenty other things that have to be finished before we close the project. So this is just a decision that Husasmidjan needs to take with us, and it has not been discussed yet because of all the problems.

You told us that this has been one of the most difficult cases, has that influenced the culture at Annata, has it been frustrating for everyone? Has it been a source of negativity?

Yes, it has been really difficult, and the moral has been going down. How you say "stemming" the mood has been affected a lot. And we had some really low times, in March that was a ridiculous month. Usually we are selling maybe, I will just tell you the numbers. (The rest of this sentence has been deleted for confidentiality reasons)

So it is influencing your normal working hours as well?

Yes, we are working twenty-four hours. Everybody here almost. And that is a huge pressure on everybody. And still not working through everything, because we also have other project which were really difficult too. Not as difficult as Husasmidjan, but the go lives, they were difficult because of the lack of resources that we had in every project.

Annata's lack of resources?

Yes, our lack of resources. So this has been a very difficult task. And our manger he said that this was definitely the most difficult or challenging time in the history of Annata, which is fifteen years.

## Appendix 12- The Kübler-Ross Change Curve (1969)

