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**SAP Dispute Management implementation**

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## ABBREVIATIONS

AR	Account Receivables
BCFI	Balanced Critical Factor Index
BPI	Business Process Improvement
CRM	Customer Relationship Management
DM	Dispute Management
FSCM	Financial Supply Chain Management
SAP	Systems Applications Products
SAS	Shared Account Services
TQM	Total Quality Management
RCA	Root Cause Analyze

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**TIIVISTELMÄ:**

Tutkimus keskittyy löytämään vastauksia miten kohde yritys hyötyy SAP:n riidanhallinta – työkalun käyttöönotosta ja mitä mahdollisia haasteita kohdataan. Toinen tutkimusongelma analysoi miten riidanhallinta työkalun avulla voidaan parantaa yrityksen koko tilaus- toimitusketjun tehokkuutta. Tarkoitus uudessa riidanhallinta työkalussa on saada siitä mahdollisimman paljon hyötyä, opitaan sen antamista tuloksista ja jokaisesta riitatapauksesta, että pystytään vähentämään niiden määrää.

Tutkimus käy läpi asiakassuhteiden hallinnan tärkeyttä sekä prosessin kehitykseen tarkoitettuja metodeja, joilla voidaan parantaa sisäisiä prosesseja ja estää myös riitatapausten syntymistä. Tarkastellaan myös SAP:n riidanhallinta työkalun toimintaa sekä sitä kuinka riitatapauksia voitaisiin kontrolloida. SAP:n riidanhallinta työkalun käyttöönotto on kuvattu globaalien teknologian alan yrityksen kautta.

Vastauksia tutkimuksen kysymyksiin saatiin haastatteluissa ennen ja jälkeen SAP:n riidanhallintatyökalun käyttöönoton. Tutkimuksessa käytettiin myös Balanced Critical Factor Index – metodia, jonka kysely lähetettiin loppukäyttäjille. Tässä oli tarkoitus saada laajempi kuva uuden työkalun tärkeistä tekijöistä. Lopputuloksissa on myös omaa havainnointiani, joka perustuu loppukäyttäjien koulutukseen ja saamaani palautteeseen.

Tutkimus osoitti, että suurin hyöty riidanhallinta työkalun käyttöönotoista oli sen tuoma läpinäkyvyys eli kaikki voivat seurata riitatapauksia ja kommentoida niitä. Tutkimus myös osoitti yleisimmin käytetyn syykoodin riitatapauksella, joka oli: *Maksu puuttuu*.

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**AVAINSANAT:** Asiakkuuden hallinta, taloudellinen toimitusketjun hallinta, riidan hallinta

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**ABSTRACT:**

Research questions concentrate on finding answers how the case company will benefit and what challenges there can be when implementing SAP Dispute Management tool. Research is also based on how to impact the whole order to cash process and making it more effective to prevent disputes. The idea is to take advantage of SAP Dispute Management and learn from its results and teach end-users to learn from disputes' reasons and find away to minimize them.

Research goes through the importance of Customer Relationship Management and process improvement methods which can be used to improve processes to prevent dispute increase. Research presents the logic of SAP Dispute Management and how to control dispute cases. SAP Dispute Management implementation has been described through a global case company.

Answers to the research questions were find through end-users' interviews before and after SAP Dispute Management implementation. Research used Balanced Critical Factor Index method and send questionnaire to end users. There are also results of my personal observation based on training of the end-users and from the feedback I have received.

Research showed that the most important benefit in implementation was to have the transparency of the dispute cases through the whole company. Another result is that most commonly used reason code in disputes has been the code: *Missing payment*.

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**KEYWORDS:** Customer Relationship Management, Financial Supply Chain  
Management, Dispute Management

## 1. INTRODUCTION

The idea for this research emerged immediately after SAP Credit Management was implemented in the case company. I was planning on participating in the project team which was implementing SAP Dispute Management. Thus, I considered that the case company would benefit more from the SAP Dispute Management tool, if I wrote my thesis on it. I found myself immediately motivated because this gives me an opportunity to study the more financial side of SAP.

Dispute Management means controlling disagreements or unclear situations between the customer and the company. Problems may arise for example if customer doesn't receive all the necessary documents about the products or if there is wrong payment term in invoice. This can cause situation that customer is not willing to pay invoice on its due date. This situation should be solved as quickly and with best professional skill as possible.

The main goals of this research are to study how the case company will benefit from SAP Dispute Management tool, if the tool is providing right elements towards the case company's needs and how to improve the orders of the case company leading to cash flow with the help of Dispute Management tool. In addition, one aim is to analyze how SAP Dispute Management implementation succeeded and to describe lessons learned.

There is no theory available of how to handle Dispute cases in a company. However, there is one theory available about reclamation handling and early dispute resolution handling. This research aims to give an example of how Dispute cases can be handled in a company. Therefore, the answers for the research problems have been found through observation, interviews and a questionnaire.

The structure of this thesis consists of the following sections: theoretical framework, introduction to the dispute handling of the case company, research results and conclusion. Theoretical framework presents Customer Relationship Management from the relationship improvement's point of view. Chapter three introduces the process



improvement methods which help in problem handling that have been noticed through Dispute Management. In addition, there is a section which focuses on how to react in changes within an organization. This is worth noticing when implementing or developing something new and expecting that the whole organization will use the new tool as well. Chapter four introduces SAP Dispute Management and what is its core meaning, furthermore the intention is to explain in what larger entity it belongs. There are a couple of examples of how other companies are handling dispute management and their key issues in controlling the dispute management tool. Chapter five presents the Case Company X and introduces their expectations and “as is” situation about Dispute Management. There is also a section about benchmarking company Y in Dispute Management process handling. Chapter seven introduces research findings comparing theoretical framework with the case study and discusses Dispute Management’s future. Chapter eight concludes the findings of this research.

The consistency of this thesis handles first the customer relationships of the beginning which is conveyed through the management’s point of view and then moves towards the smaller process called Dispute Management handling in a company. Purpose is to give an idea how disputes can be handled in a company and how processes should continuously be improved.

### 1.1. Research problem and Objectives

Besides producing great products and services a case company needs to have excellent relationship with its customers. To improve customer relationship its better to try to solve and make improvement in difficult issues then to just leave them. Competition is hard in today’s business world so Customer Relationship Management has come one of those issues where companies are really putting an efforts. Case company doesn’t have a common tool to handle dispute cases. They are implementing SAP’s Dispute Management tool to harmonize the whole company to handle dispute cases in the same way. Hopefully customer will realize that case company’s target and main concern is to have an order to cash process where would not be any unclear situations or

misunderstandings. It also gives an impression that case company really care about Dispute cases and try to solve them as quickly as possible.

Research will have two main problems:

1. How to analyze Dispute Management implementation success and what benefits was received from it?
2. How to have an effect on the whole order to cash flow to make it more efficient without causing disputes?

## 1.2. Research Approach and Methodology

The research method is mostly based on the qualitative approach. It is based on observation and interpretation of the situations and people. Purpose is to describe and analyze Dispute Management implementation project in a “lessons learned” point of view to see how the expectations met the results.

The empiric part of this thesis is mostly based on interviews and questionnaire for end-users. Observations for the conclusions are partly consisted of my own feelings towards the Dispute Management project and how the theory will help constructing Dispute Management forward. I also participated in the Dispute Management implementation project as a testing manager. Therefore, I have not acted completely as an outsider in terms of being objective in this research. I did very intensive work for implementing Dispute Management in the case company and that helped me fully understand what Dispute Management is all about. In addition to my own thoughts and opinions, I also used the BCFI method and interviews to analyse the end-users thoughts about Dispute Management.

## 2. CUSTOMER RELATIONSHIPS

To cherish the customer relationships the companies have opened up 'the complaint department'. This is a department which handles all the negative comments, returns and other customer concerns. After a couple of years people started using the sentence "Customer is always right", because it was thought to be more profitable to accept a little loss and keep the customer satisfied than to argue with him. Companies used to have reclamation departments where they handled customers' unsatisfactory experiences about the products and/or services. In the 1960's the reclamation department was transformed into a customer relationship department. Customers' needs were understood better and the relationship marketing was developed. The aim was to develop a reliable customer base, because an individual customer relationship can be turned into a permanent one. This is hoped for, because it is cheaper to keep the already existing customer relationships than to find new customers. The basis for building a strong customer relationship contains for example the following matters:

- Customers have a possibility to fill in a feedback form.
- The general needs of a customer should be asked when he calls to report a problem.
- The call center personnel should be trained to handle dispute cases systematically and constructively.
- Customers' feedback should be responded immediately.
- Company should show that they are actually listening to their customers.
- The whole organization should be ready to service the customers whenever needed (Customer relations).

A customer relationship is composed of series of interactive episodes between dyadic parties over time. This means that the content of each episode between a customer and a sales person is a range of communicative behaviors including speech, actions and body language. Examples of these episodes are: making a purchase, enquiring about a product, making sales call or resolving an invoicing dispute. If a customer purchases coffee from a coffee shop, the episode is called a transaction not a relationship. If the customer continuously returns to buy coffee from the same coffee shop, because he

likes its atmosphere or the taste of coffee, it can be called a relationship. However, both parties should believe that the relationship exists. Therefore, the belief is one factor that creates a relationship. Another is trust, which occurs when parties share experiences, interpret and assess each other's motives. When they learn more about each other, risks and doubts are reduced. For these reasons trust is the glue that holds relationships together across time and experience. (Buttle 2009: 27-29).

Genuine interaction and the aim of mutual benefit are also prerequisites for the success of a relationship. It should be in both parties' interests to find new opportunities in order to develop the relationship. The development of the customer relationship value should be seen as a process since they always consist of several encounters. Thus, the customer's purchase situation does not consist of dramatic events. Trading is only one point of view in the customer relationship management. Usually sales department oversees the sales aspect of the relationship. It should be remembered that other departments equally influence on the development of the customer relationships. Nowadays, the production department has a great deal of direct contact with the customers and so does the invoicing department. (Storbacka&Lehtinen 2001: 6). Basically, the genuine customer relationship means that the company has the focus on the customer retention and has the appreciation of the customer value. Focus should not be only on getting customer information to database or to set barriers if customer wants to finish off the relationship. It should be remembered, that the customer information database can never be a substitute for a genuine customer relationship. (Barnes 2001: 18-19).

A company can develop customer relationships from several perspectives: relationship profitability, reference value and benefitting from the customer competence. It contributes, if the customer relationships are long-lasting in order to carry on with the development. It is better to have a strong relationship, because then it will also last longer and can survive minor problems. TQM i.e. Total Quality Management helps with the customer satisfaction. Its fundamental idea is that the company processes should help a customer to receive full benefit from the company operations. TQM will be explained in more detail in chapter three. (Storbacka&Lehtinen 2001: 77-79).

As discussed earlier, a significant resource of the company is its customers. Without them the company cannot exist. Customer management is an ongoing learning process where the main target is to learn more about the customers. An important factor is to be able to see things in customer's point of view. As a part of company's basic functions customer relationship management is here to stay. Yet, the practice is still finding its forms. Technology that is developing fast provides many kinds of possibilities to customer relationship management. For example, information systems are the fastest developing section in technology. The meaning of information system is to store all the information that company's enterprise resource planning i.e. ERP has. This way it can be used to search reports and analyses about company's key information. (Mäntyneva 2001: 9-12, 82).

## 2.1. Customer Relationship Management and Sales Force Automation Systems

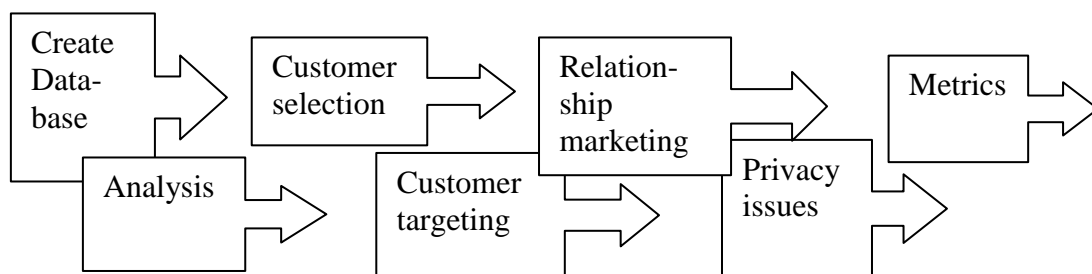
Customer Relationship Management i.e. CRM includes company's core strategy, which combines internal processes, functions and outside network to create and deliver the wanted value and profit to the key customers. The customer information can be stored in different information systems. The main goal in CRM is to develop as profitable relationship with the customer as possible. Nevertheless, some companies have decided to develop Internet based self-service tool for their customers and others in order to sell additional products and services to their customers. It is important to the company to be capable of measuring the customer profits compared to the costs either in customer segment level or individually. Profits are easy to find from company's database invoicing but costs from getting customers or serving them is much more difficult to find. The largest CRM vendors are: 1. Siebel, 2. SAP, 3. Oracle and 4. PeopleSoft. (Buttle 2004 34-40, 66).

Companies adopting CRM as their core business strategy need to create an organizational structure that achieves three major outcomes through its marketing, selling and service functions:

1. The acquisition of carefully targeted customers or market segments.
2. The retention and development of strategically significant customers or market segments.
3. The continuous development and delivery of competitively superior value propositions and experiences to the selected customers. To achieve these outcomes is not going to happen alone. Company should to work close cooperation with suppliers, partners and other members of their business network. (Buttle 2009: 469).

CRM is based on the customer data management in which the customer relationships can be managed. For that reason, the company implements a database, where they can store the most important information about the customers. These are, for example, the customer purchase history, sold pieces and the delivery date for goods. Another stored information is the contact information. In other words when the company contacted the customer the last time and what was it about. The third information is about which segment the customer belongs to or other information that needs to be reported further. The fourth important issue is how the customer has contacted the company. Was it due to the impact on marketing, has a sales person contacted him or some other way? Catering all this information a report and analyses can be done. (Winer 2001).

Sometimes it is not about that the company does not have the data about its customers, it is about that the information is not in one place from which it could be easily searched and found. (Lehtinen 2004: 125).



**Figure 1.** Model for customer relationship management (Winer 2001: 91).

Customer information database has to be constantly updated, and its data should always be revised according to the needs. It is important that the changes for example in

customers' segment are done immediately to the database and not to be left, because then it might never get done. Everyone should follow the same habit and not to expect that someone else will do the updates into the database. Yet, weekly or monthly maintenance operations can work out in some organizations, but this needs to be clear to everyone so it will not be forgotten because the most important thing is to keep customer database revised. Some companies might have a very large customer master data, which is hard to keep updated, even if the customer information is updated. This can be handled by refreshing customer master data with the help of a program. In 2010 there were about 10 vendors providing customer data refresh programs. (Oksanen 2010: 298-300).

CRM should be considered effectively to its architecture. It means that CRM systems must be able to be found in the office, out of the office and on the Internet. CRM should have a good performance and be flexible in order to suit constantly changing and growing user community. CRM systems are almost always integrated with other in-house systems, including back-office systems. CRM project managers should consider architectural issues to get CRM outcome as modular as possible. It might be costly or not even possible to change system architecture as it is installed. (Buttle 2009: 381).

Adrian Payne and Pennie Frow's article *A Strategic Framework for Customer Relationship Management*, declare that companies adopting CRM are not entirely sure what CRM is comprised of. Payne & Frow discovered that to some it means direct email, a loyalty card scheme or a database whereas others think it as a help desk or a call center. In addition, some companies thought that it was about populating a data warehouse or undertaking data mining and some other companies thought CRM is an e-commerce solution. Lack of real acknowledgement of appropriate definition of CRM can contribute to the failure of a CRM project. (Payne & Frow 2005: 167-168).

A Sales Force Automation Systems (SFA) is a part of Customer Relationship Management system which automatically records all the stages in a sales process. SFA includes a contact management software system which tracks all contacts that have been made with a given customer, the purpose of the contacts and any follow-up that might

be required. This ensures that sales efforts will not ask the same issues twice from the same customer. Furthermore, SFA has a sales lead tracking system, which lists potential customers through phone lists or related products. SFA can include also sales forecasting, order management and product knowledge. Developed SFA systems have features that help the customer actually model the product to meet their requirements through online product building systems. SFA system should be adapted and integrated to all departments within a company. Otherwise there might be a lack of communication which can lead to different departments contacting the same customer for the same reason. Due to the help of SFA the sales personnel can use their time more efficiently and more effectively. See the picture below explaining the features in SFA. (Pythagoras 2009).



**Figure 2.** Sales force automation system. (Pythagoras 2009).

## 2.2. Customer Value Management

*“Value is the customer’s perception of the balance between benefits received from a product or service and the sacrifices made to experience those benefits.” – Buttle*



The goal of Customer Value Management (CVM) is to deliver optimal value to the customers by a customer defined value. A business process is a sequence of activities that usually flow across different functions within a firm. The result is shown in the delivery of a desired outcome, product or service. Quite often every function individually tends to optimize its process to meet customer needs rather than optimize all the organizations' functions. To achieve this, organization should document, standardize, improve and optimize its horizontal cross-functional processes. The main point is that the management must ensure that the organization's processes are customer focused and constantly recalibrated against customer needs. (Thompson, Stone & Foss 2001: 190).

Company is analyzing the value of a customer in the company's point of view. What is the customer value at this moment and what is the potential value in future? By doing these analyses company classifies customers into different categories. It is important to find the right craters how to evaluate customers. It can be seen in two ways. Customer sees the customer relationship in different way than the company does. Customer strategies are created by combining these two views and, thus, the companies are able to maximize the resources that customers can give.

The concept of customer value can be divided into two categories: the fact-based and evaluations. The fact-based category means that all the value measures are in company's documents, accounting and in other documents that relate to the customer relationship. Therefore, the yearly volume for a particular customer is widely known. The evaluations category is based on the key person within the company, for example accounting manager has an ability to evaluate the customer in a way that no documents can. It can be noticed that customer relationships are quite different when comparing business-to-business with business to customer sales. In business to business it is easier to get to know the customer and usually there are fewer customers. That is why it is easier to keep in touch more often. In business to customer sales it is hard to know who the end-users really are. This makes the customer value evaluation scale more difficult, but not impossible. (Lehtinen 2004: 123-124).

### 2.3. Customer Relationship Strategies

*“The aim of all relationship strategies should be to increase relationship value.” –*

*Storbacka & Lehtinen*

At first there is the business strategy, in which the company determines how the customer strategy should be developed and evolved over time. Creation of the business strategy is usually the responsibility of chief executive officer, the board and the strategy director. The customer strategy is usually the responsibility of the marketing department, even though CRM needs a cross-functional approach for example including IT. (Payne & Frow 2005: 170.) When defining a Customer Relationship Strategy for the providing company the customers' roles should be clearly clarified. Providing company should have an understanding on how the customer creates value to the company's processes and how the company can provide competence and support in the customer value creation. When choosing the right strategy, the company's vision of its own role should be clear. On the basis of this vision, the company can decide the scope of the relationships that it pursues, the range of products it wants to produce and to what extent it is prepared to adapt its own processes to the customer's. Eventually the company has decided how many relationship strategies it wants to pursue. In addition, this can be seen in their vision. Usually companies tend to have more than one relationship strategy. This way the customer can choose one of the strategies depending on how much he is willing to invest in it.

When thinking about the customer strategy, it should be noticed that someone has to adjust to the new strategy, either the customer or the company. In situations like these, the meaning of the relationship comes up. If there is a perfect trust between the company and the customer, even the customer might adjust to the new strategy. Examples of the relationship strategies are: the Clasp strategy, the Zipper strategy and the Velcro strategy. In Clasp strategy the customer adapts to the company's process. However, the encounters stay minimal and tools are needed to communicate about the benefits of a continuing relationship to gain the customer's commitment. In the Zipper strategy both the customer and the company provider are equally adapting to each

other's processes in a zipper form. This kind of commitment requires a long-term collaboration and that both parties' processes are analyzed systematically and continuous efforts are done for adapting the processes better. The Velcro strategy means that the company as a provider adapts to the customer's processes so that the customer does not have to invest anything to change its processes. This is not always a good thing because when a company accepts blindly customers' feedback and tries to create the processes accordingly, the actual result might not be what the customer needs. (Storbacka & Lehtinen 2001: 99-102).

One point of view, when customer strategy is concerned, is how to get in a long run as much resources from the customer as possible. This is an important way of looking, because the success of the strategy is measured on the basis of how much resources the company gets from its customers. This should outnumber the investments that the company has made in order to get the customer resources. When thinking about this strategy it can be asked if the company needs a different business strategy at all or can all other strategies be lead from this main strategy: how to get the resources from the customers? This can be the case if wanted. This means that the customer focused strategy would be the starting point for other strategies. It requires change on the way of thinking and in the strategy work. (Lehtinen 2004: 157).

### 3. PROCESS IMPROVEMENT

*“The complexity of most business processes makes it necessary to formally organize improvement activities” – H.J. Harrington*

Company's business process improvement can be seen as a chain of subsequent phases. It includes understanding the external customer requirements, evaluating the importance of business processes, evaluating the improvement opportunities and selecting the critical processes. In order to be capable of performing all these phases it is recommended that the company would form an Executive Improvement Team (EIT). EIT should find out the customer requirements, for example using comment cards or customer service data for the product or service, and also understand the importance of those requirements. From those requirements EIT should identify the processes that directly and indirectly impact on the external customer. Then it should be identified which processes have major impact on the external customer requirements.

Typical business processes might be: new product development, product design release, production planning, material management, hiring, billing and collections, after sales service, human resources training or customer needs analysis. Evaluating the improvement processes means that Executive Improvement Team takes some key indicators, for example efficiency, cost, cycle time and adaptability, and rate every process against the information gathered about the process. Then the team selects the process with the best opportunities for improvement and process owners for the process. The critical processes should be of high importance and high improvement opportunities. Processes with low importance, even from the customer perspective, should not be selected for initial improvement efforts.

Same method can be used to improve organizations' internal processes by replacing an external customer with the business unit. When improving internal processes, the costs are reduced and quality of work improves. When internal costs are reduced also the cost of the external customer can be reduced. All organization processes, activities and jobs

exist because of one thing: to represent the value to the customer. (Harrington 1991: 35-45).

Sometimes in an organization many employees are doing own processes and projects and the main interests seem to be that the measurements of that particular process look good. They might not think that it will have an effect on the others further down the process. This causes sub-optimization to occur throughout the workplace. (Harrington 1991: 15).

Book called *ITIL, The Official Introduction to the ITIL Service Lifecycle* introduces Seven- steps in Improvement Process:

1. Define what you **should** measure
2. Define what you **can** measure
3. Gather the data. Who? How? When? Integrity of data?
4. Process the data. Frequency? Format? System? Accuracy?
5. Analyse the data. Relations? Trends? According to plan? Targets met? Corrective action?
6. Present and use the information, assessment summary, and action plan.
7. Implement corrective action.

Idea is also to identify: vision, strategy, tactical goals and operational goals. (ITIL 2007: 130).

The process improvement has to be continuous. Otherwise the process improvement slips backwards while the competitor moves forward by improving all the time. Even if the process seems to be in a very improved state, it still has to be developed further. It should be remembered that every day comes new ideas of new methods, programs and equipment. Even more importantly, the customers' expectations and wishes are changing quite often, so it is vital to keep up with the pace. To get started on the continuous improvement, the customer expectations should be studied and then the target for the process should be set and the company should keep in mind the customer expectations. Then the plan should be developed on how to meet these targets and then it should be implemented. When targets are met, it is time to celebrate and congratulate

the team and also a reasonable reward is in place. When the team is celebrating the achieved targets, the cycle starts all over again and the customer expectations are studied and developed further. The main point is that this is a never-ending cycle for the company. This is the way to achieve continuous improvement in a company. Every employee of the company is needed to help with this process, not just the team. Harrington's wheel of fortune is one guideline for continuous improvement in organization and provides long lasting results when following it right.



**Figure 3.** Harrington's wheel of fortune. (Harrington 1991: 246-249).

### 3.1. Problem solving

*"A question for which there is at the moment no answer is a problem" – B.*

*F. Skinner*

Problem solving is something that leaders of the companies have to do constantly. Solution should be found out in a new way. By this it is meant that if things are always done and solved in the same way, the results will also be similar. The latest markets and

trends drive the business world; it means that companies have to keep up with the speed. (Duffy, Beecroft & Moran 2003: 17).

How is a problem defined?

1. When the process is not accomplishing what it is supposed to accomplish and employees do not know why.
2. When things keep on going wrong no matter what everyone does.
3. When everyone believes that there is a problem that needs to be solved.

Problem solving is a part of everyone's job and expertise. Problems occur at all levels of an organization, therefore, one problem solving technique does not fit to all problems. The solution depends on the problem. For example, group problem solving gives lots of new ideas on how the difficult situations can be handled. Problems are normal and should be considered as opportunities to enhance matters. Employees should never be accused of the problem; the main focus should be on the problem solving. Individual employees should try to solve the problem on their own and not to wait for their supervisor to solve all the problems. (BPI Consulting 2004).

Grace L. Duffy presents in her book: *The Executive Guide to Improvement and Change* a Generic problem-solving model. It has four main steps:

1. Define the problem.
2. Generate alternative solutions.
3. Evaluate and select an alternative.
4. Implement and follow up on the solution.

First, when defining the problem facts should be differentiated from opinions and each function should be consulted. The first step of the problem solving is completed when a careful study of the problem has been performed and the root causes have been analysed. The second step is to find as many alternative solutions as possible and brainstorm with these ideas. It is time to make a decision of the best solution during the third step. Alternatives should be carefully measured by weighing the disadvantages and advantages. When selecting the final solution these issues should be thought through: it should not cause any unexpected problems, all the persons who are related to this issue are accepting the solution, implementation of the best solution is likely and it fits within

the organizational constraints. The last step in the problem solving is to implement the solution and follow up the solution. Already at the implementation phase, it is better to involve as many people as possible from the organization to create a pilot test of the chosen solution. This way there will be less resistance against the new change. Feedback should also be gathered and long-term results should be evaluated based on the final solution. (Duffy, Beecroft & Moran 2003: 17-19).

There is also another view for identifying and solving the problem besides the generic problem solving model. That is created to answer the following questions:

1. What is the actual situation? What is the desired situation? And what is responsible for the *difference* between the actual and desired?
2. Generating alternative solutions, with vertical or/and lateral thinking.
3. Selecting a solution and thinking if the solution is *effective* or *efficient*?

The 4<sup>th</sup> step is to evaluate the results and answer the question: Are desired and actual situations similar?

When analysing the problem, it is easy to make mistake by focusing too much on finding the right answers rather than the right questions. Analysing and synthesis generate questions and problem solving generates answers. In problem solving process there can be two kinds of thinking; vertical thinking and lateral thinking. Vertical thinking means more straightforward thinking. Thus, the problem is considered only in one perspective. For example a purchasing manager, who sees a sales person only as a source of goods and services, and not as a source of valuable market information. Lateral thinkers are thinking broader. They see the issue more widely and from several perspectives. All the managers should be able to think laterally, even if the problem solving might take a little longer. When the different alternatives are considered, it is good to keep in mind that the solution should be effective and efficient at the same time. For example a company X is two weeks behind from its schedule. The problem is how to catch up? Company X considers taking external workers who are not familiar with the work. Another option is that the company's own workers would do some overtime work. Company X decides to go with the second option. This option may be effective but it is not efficient, because people who work overtime are not efficient anymore.



In problem solving process it is important to remember that the manager's job is not only to try to find solutions for the problems but to find problems as well. (Kreitner 1980: 54-63).

### 3.2. Process optimizing

The ability of how the process can be optimized or improved is dependent on how well the process can be controlled. This, however, is dependent on how accurately the measurements have been done during the process. The process optimization can be seen through measuring, controlling and optimizing.

Sometimes it is difficult to have optimal process control because there might be one of the following: complex correlations between process variables, process might have several levels and all with different optimal variable settings, changes in process conditions requires adjustments in variable settings or some cases several quality parameters need to be optimized at the same time.

In order to achieve a successful process optimization, an optimization goal should be in target. This goal should include a cost efficient combination of interesting process outputs. It is also important to automatically change the optimization goals if the process level changes, if there was an effective goal. It should be possible to carry out process optimization regardless if the output from the process models can be used or not. In spite of the seasonal changes it should be possible to continuously carry out optimization of long-term processes. (Metso, Inc).

Streamlining the process is one of the key factors for more functional process optimizing. Streamlining means that the waste and excess are reduced and the process is completely cleaned so that it is working with the best performance and quality. Thus, the 12 significant process streamlining factors are presented and they all aim at better results: 1. *Bureaucracy elimination*. Remove unnecessary approvals or administrative tasks from the process. 2. *Duplication elimination*. Different persons do sometimes

same activity; remove this by streamlining the process. 3. *Value-added assessment*. Evaluate activities in the process. Give more attention to activities that affect the customers. 4. *Simplification*. Process activities should be kept simple. 5. *Process cycle time reduction*. Find ways to reduce cycle time in process. 6. *Error proofing*. When process activities are kept simple, it is difficult to make mistakes in process. 7. *Upgrading*. Equipment performance should be kept in the highest level. 8. *Simple language*. Speaking and writing should be kept in level that everyone can understand, also the instructions should be clear and easy to comprehend. 9. *Standardization*. All employees should do the activity in the same way. 10. *Supplier partnerships*. Suppliers should provide improved inputs to the process so the output of the process will be better as well. 11. *Big picture improvement*. If the already mentioned 10 factors did not work, a radical change should be done. 12. *Automation and/or mechanization*. To restructure the old boring equipment, tools and computers to encourage employees for more creative activities. (Harrington 1991: 131-132).

### 3.2.1. Business Process Improvement (BPI)

Business Process Improvement (BPI) is a system which will simplify and streamline operations while ensuring that internal and external customers receive an extremely good output. The main idea is that the organization has business processes which eliminate errors, minimize delays, maximize the use of assets, promote understanding, are easy to use, are customer friendly, are adaptable to the customers' changing needs, provide the organization with a competitive advantage and reduce excess head account. BPI has five phases in the process: Organizing for improvement → Understanding the process → Streamlining → Measurements and controls → Continuous improvement. (Harrington 1991: 21-23).

### 3.2.2. Continuous Improvement Process (CPI) i.e. Kaizen

The word Kaizen comes from Japanese and it means continuous improvement. Kaizen's main idea is to improve everything within the whole company. Basically this means

everything that might make something easier. Improvement is meant for all employees, not just for the management or white-collar workers. If there is nothing wrong with the process and an employee finds something worth improving, it should be taken into use. Three main things that should be improved are productivity, safety and reducing waste. Below is a figure 4 which shows how to start implementing the improvement suggestion. (Graphic products 2012).

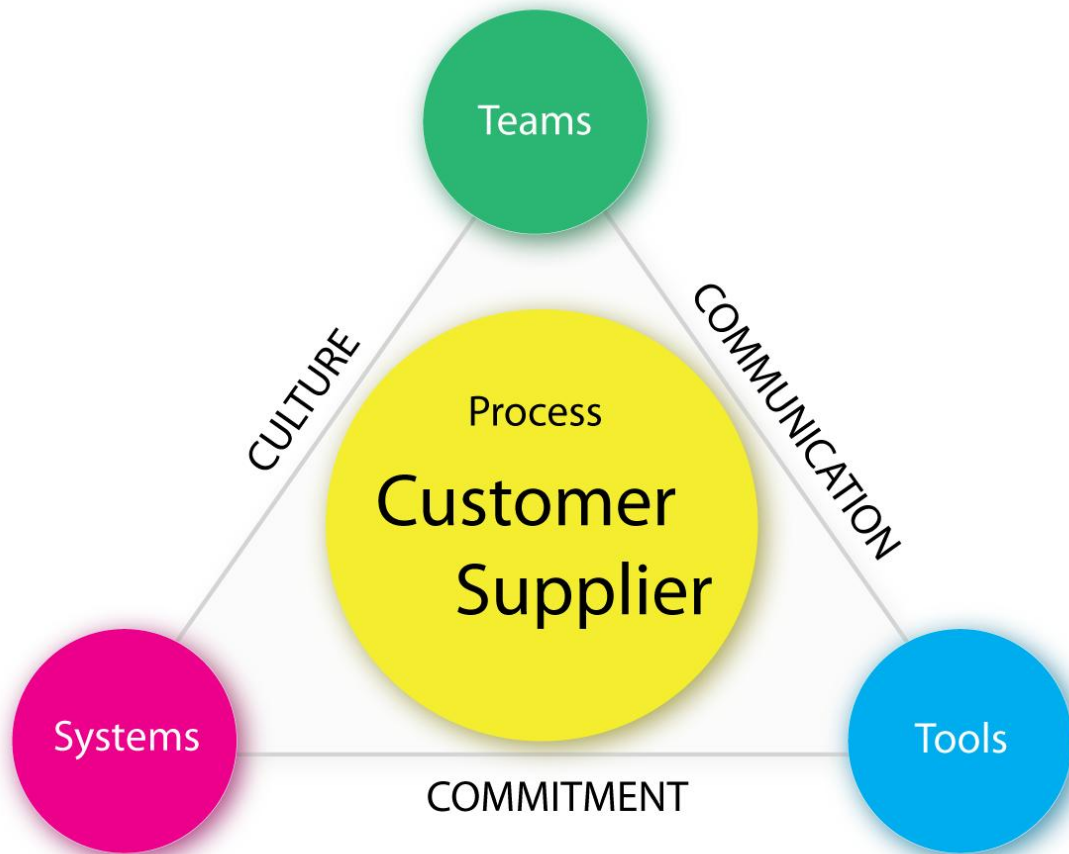


**Figure 4.** Continuous Improvement Process. (Business process idea 2011).

### 3.2.3. Total Quality Management (TQM) – Lean Six Sigma

The purpose of TQM is to improve competitiveness, effectiveness and flexibility. To achieve all these goals, there should be focus on the planning, organizing and understanding all the activities. In addition, all employees should be involved in TQM to achieve a common goal which improves the quality. TQM requires management commitment and ensures that quality improvement is one of the topics in company's strategy. The focus should be on encouraging people instead of seeking problems. TQM should be in use if company has problems with operations' costs, errors, wastes, standards, systems, training and job instructions. The main area of TQM is related to customer-supplier relationship in which the interaction should be in control. Other TQM

outcomes are culture, communication and commitment. These provide the base of TQM model.



**Figure 5.** Total quality management model – major features. (Oakland 1993: 40-42).

Lean Six Sigma is a quality focused improvement tool, but it also concentrates on the productivity, profitability, market competitiveness and on the customer relationship improvement. Lean Six Sigma methodology is based on eliminating waste and improving flow by reducing process variations with problem solving and statistical tools. It should be noted that these methods used independently can give positive results but when all methods are used at the same time they complement each other and might even provide dramatic gains. By improving flow Lean Six Sigma means that services and products are delivered just on time (JIT). Of course with the right amount, right quality levels and at the right place. Deliveries should only happen when customer

demands products or services. Lean system goal is to have an immediate and effective response to fluctuating customer demands and requirements. (Cudney & Kestle 2011: 5-6).

#### 3.2.4. Root Cause Analysis (RCA)

Case Company X has its own instructions of how to handle Root Cause Analysis. It should be used internally when customer requires an explanation about a particular issue. First the problem should be described in detail. The description should include information about the location, frequency, symptoms, impact, process, equipment and item data. Information should also be collected from associated faults that led to the failure(s).

When the description is done, it would be good to establish a team. Team should include members that represent the customer, process owner, quality and other matters that are necessary for solving the issue. Additional information should be gathered by interviewing persons who are involved and investigating undocumented data that could help solving the root cause.

Nevertheless, the third step of the root cause analysis is to isolate the situation. Depending on the issue, the isolation should be done so that no further damage happens. However, this can mean stopping the process. After that the failure ought to be analyzed with the team. After that the brainstorming technique should be used in order to find out why the problem has occurred. The team should identify three most probable causes and perform five analyses of each cause and then the most probable is identified as the root cause and validated in the process through observation or testing. To find a solution for the root cause, brainstorming should be again used with the team and the possible solutions should be generated. Thus, the best solution for the root cause can be identified and a detailed plan of how to implement the solution can be created. A verified solution can be implemented as designed within the schedule and budget planned.

Then take the necessary actions to standardize the solution and deploy it across the organization to prevent any future occurrence of this issue. After a while verify the long-term effectiveness of the new process controls. After while it should be determined the time frame necessary to verify that the solution has been sustained and then make the investigations that will provide data supporting the success. (4Q Root cause analysis 2011).

### 3.2.5. Plan Do Check- Act (PDCA)

Plan-Do-Check-Act is the problem solving process developed by Walter Shewhart. It is part of the Total Quality Management (TQM) process. PDCA's idea came from fact that a systematic approach is needed to successfully solve problems. It means that the first thing is to **plan** the business improvement approach, then **do** the planned work and **check** if it is working properly. The last thing to do is to **act** to modify the process based on what has been learned about it. (Mutafelija & Stromber 2003:16).

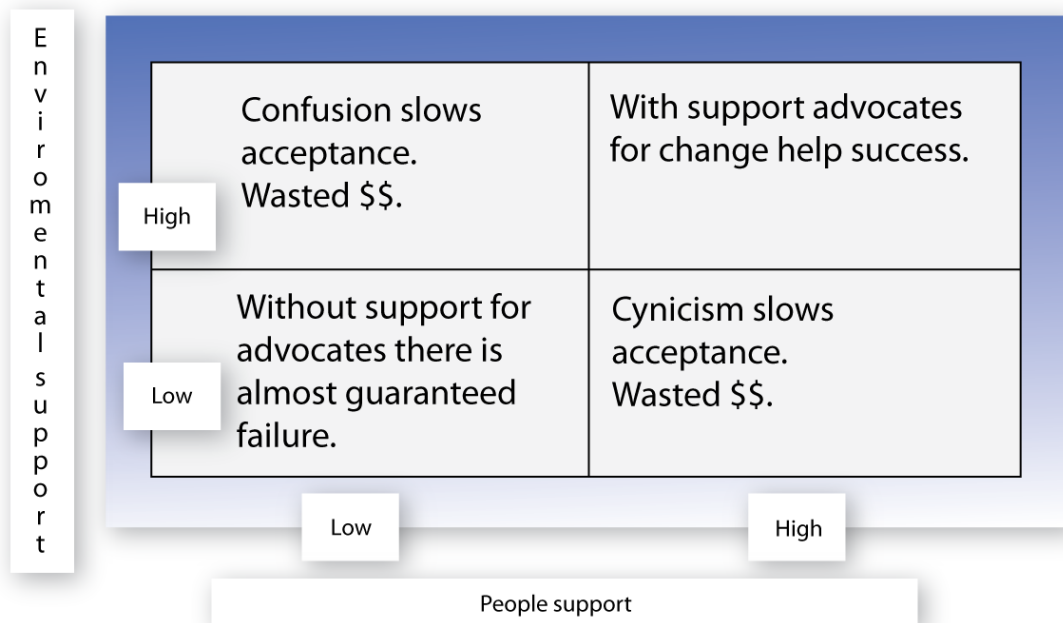
### 3.3. New change in to organization

*"It's not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change". – Charles Darwin*

Well-known enterprises invest a lot of money to new projects and the project management starts to exist as their core business. Quite often enterprises forget that people who do not work with the project need to get involved in the new projects as well. It will become useless if other employees are not going to use it or study it. One point of view is Malcom Gladwell's theory called *The Tipping Point*. He examined how changes spread by word of mouth. Gladwell saw organizational changes more like social changes. He identified three factors which are the most effective whether the change is going to be permanent or not. These three factors are content, carrier and context. He explained that the content means the value of the change and how

contagious the idea is among people. By carrier he means that there should be few people who have the respect from the other people. When they are sharing this new idea, others will follow. By context he means support from management. That is sometimes underestimated and can lead to a situation that new idea does not spread its wings. (Shapiro 2003: 1-3, 30-37).

When employees notice that a new change has a positive effect on their work and that they benefit from it, they start to spread the good news to other people as well. If these advocates are respected people, others will listen to them and their mind about the new change will get a more positive tone. Due to that they will start to use the new-implemented way of work and the rest of the people in organization will follow. An important thing is also that people really understand the purpose of an action and see that the management supports it. There are two types of support that leaders can give: people and environment support. Both support types are equally important. People support means that there will be lots of explaining about the change, listening to people, answering to their questions and being active with the people. Environmental support means that there is the right atmosphere for the change; stakeholders are familiar with the new case, putting necessary infrastructure in place and rewarding those who support the change. If people support is high and environmental support is low then people start to create cynicism towards it. If environmental support is high and people support is low then there will be confusion; people are not familiar with the new issue and do not know their roles in it. (Shapiro 2003: 46-50).



**Figure 6.** Environmental and People support interact. (Shapiro 2003: 50).

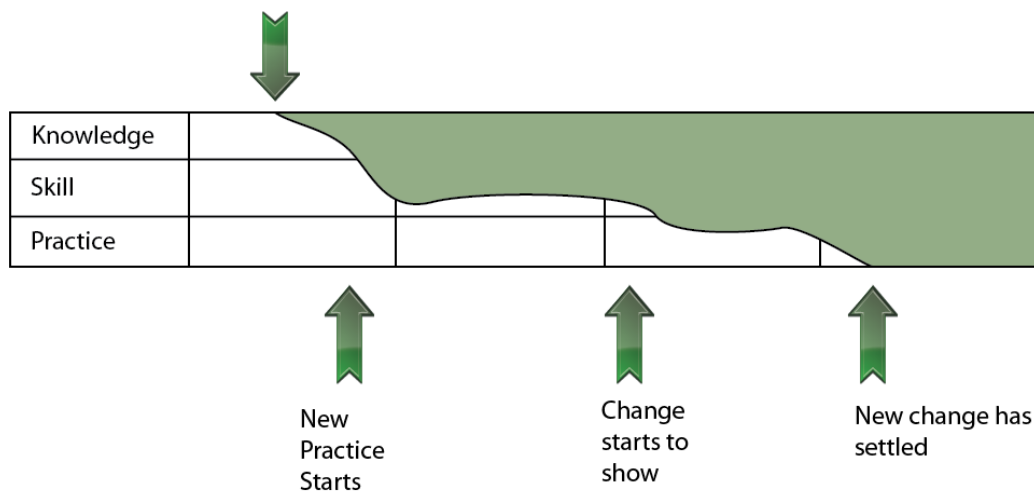
Another point of view to this issue is how the superiors see the change management. The most important tool for a good change manager is a highly developed visualization of the whole process. He should be able to handle questions like: What kind of issues there usually happens during a change process, how do people react to new things and how fast change processes usually move ahead? When reflecting these images to the current situation, the manager knows where they are now and what should be done next. There are at least three visions of change in the mind of a superior. The oldest way of change management is commanding. It means that management plans the change and then informs the organization about its decisions. The use of this is defended by saying that otherwise the competitors would get a clue what is planned. This image of change management is usually resisted within the organization.

Another image of change management is the project in which the change can be seen as a task after another which are all tightly scheduled and adapted together. Success of this project is measured with the facts how it has been stated in the budget and timetable. There is no measurement about the results of the project or the motivational aspects within the organization and its employees. In this image the employees are usually only



trained. There is no attention for example commitment, change resistance, recession phase and the change itself during the project because these things are hard to fit in the project's budget and change as tasks.

Third image of change management is called Process model. In this image the change is held relatively open. People who are a part of this new change are involved from the beginning to the planning phase. Due to that all the ideas are heard, used and therefore the change is done together. Thus, the change resistance is minimized and commitment is increased. Furthermore, people will notice that they have participated in the change, they have been partly responsible for it and their knowledge and efforts are appreciated. Process model also considers the fact that people need time to adapt to new changes. The best way to do that is to "digest" it a piece by piece. There are three factors that are identifiable from the learning behavior of people: knowledge, skill and practice. Knowledge is the shallowest and the most suitable for a change. The change takes place if a new logic is better than the old one. Logic, evidence and speaking sense are clearly the most effective ways to change someone's mind. Skill means training and multiple repetitions and that people start to believe in the new change only when he/she has repeated it five or six times. Thus it can be said that practice is in its deepest and hardest level. The common assumption is that the older people are, the harder it is to learn new things. To achieve the practice level employee needs multiple repeats, analyses and feedback. Change happens in organization only after when the person knows, has skills and acts. (Helin 1993: 117-124).



**Figure 7.** Change affect in company. (Helin 1993: 124).

### 3.4. Process measurement

*“ You can `t manage what you can `t measure. ” – “ cliché ”*

Company should generate measurements outside the company for the customers and shareholders. Company should also generate measurements within the company to improve process performances. This should be done, because the measurements help the company to understand how it is presented in customers' perspective. If they do not make measurements of themselves, they do not know how much they are creating value to the customer. The customer relationship can be understood and strengthened only by measuring the stability of it. The main idea is not that company must understand to complete the measurements but to figure out what exactly should be measured. (Barnes 2001: 193-194).

Companies need internal process measurements to improve their processes. They will see what is the current performance level of its processes. That means they should evaluate if there is a need for a change, setting priorities, determine when additional training is needed, provide realistic schedules, set goals for the process to make it better and to understand what is important in the process. Processes are usually measured with three ways: effectiveness, efficiency and adaptability. Effectiveness means that the

customer's needs should be defined and the company should be able to meet those expectations. Then the customer's needs and expectations should be changed in a measurable form. In addition the company should define how measurement data will be collected and used. Sometimes it is difficult to measure customer expectations because customers just want quick service or for example error-free reports. In these kinds of cases the measurable items might be found before the output is delivered to the customer, product or service is documented and there should be an agreement from both the supplier and the customer. Effectiveness has a straight impact on the customer and it can be seen as a synonym for quality.

Efficiency is a measurement for productivity. All the organization's processes should be carried out efficiently. Lack of efficiency is visible and measurable but poor efficiency in the process is harder to notice. Efficiency is also very important for the customer. Efficiency can be achieved by removing no-value activities, eliminating waste and keeping resources to a minimum. The main efficiency measurement requirement is the cycle time; among others are processing time, resources expended per unit of output, value-added cost per unit of output and percentage of value-added time. Adaptability means flexibility to handle customer's future expectations and customer's expectations for today's special needs. Adaptability is remembering and taking care of the customer when he or she specially needs it. The customer always remembers if there was something especially good or bad done to them. (Harrington 1991: 74-79).

### 3.5. Performance measurement

Performance measurement or control systems purpose was created in order to provide useful information. Then, this information is used as a basis for decision-making and managerial action. Moreover, it is used to compare systematic methods with each other. Performance measurement goals can be either short or long term. Short term usually means one year or less and long term performance goal means several years when there is time to adapt the process to its entity. Before creating performance measurement a couple of questions should be answered. The first questions are that what kind of

information is needed and with what frequency of feedback? Another question is who should receive the output of the data and what is needed for further actions and what should not be done?

Performance measurements should be designed so that they will achieve performance goals. A measure usually has a quantitative value so it can be scaled and used for comparison purposes. Performance measures can still be either financial or non-financial. To decide if measure is suitable for a performance goal, it should be tested and the following questions asked: 1. Does it align with the strategy? 2. Can it be measured effectively? 3. Is the measure linked to the value? Perfect performance measurement would be objective, complete and responsive. (Simons 2000: 234-235).

Performance measurements provide information for employees, owners, planning, scheduling, monitoring and controlling business. It is also a perfect tool to control improvement efforts, strategic objectives and competitive edges for its products and services. Furthermore, the measurements have a motivating effect on the employees. (Pastinen 1998: 55).

## 4. DISPUTE MANAGEMENT OVERVIEW

Dispute Management has great affect on company's profitability. When uncollectible debt is tied up in queries, payments might be delayed even over 30 days and this has negative implication for cash flow and working capital. Especially in accounts receivable disputes are causing double work, which leads to, a higher labour costs.

To an effective dispute resolution process belongs: distribution of dispute information and electronic capture of dispute case, automatic routing of identified disputes to designated resolvers trough workflow and in line with predetermined milestones, one system for recording and managing disputes, cross- functional ownership and root cause monitoring, analysis and elimination. (The Hackett Group, 2010: 1-3).

This chapter focus on explaining what actually is Dispute Management, couple examples how dispute cases can be controlled and also the spirit when handling dispute cases.

### 4.1. ERP – SAP – FSCM – Dispute Management

SAP is an Enterprise Resource Planning (ERP). SAP stands for Systems, Applications and Products in data processing and it was founded in 1972. The company has headquarters in Walldorf, Germany. SAP is the market leader in enterprise application software. SAP has more than 54,000 employees and its revenue 12.5 billion EUR in 2010. SAP has 176,000 customers in over 120 countries. SAP markets and distributes its products and services primarily through a worldwide network of local subsidiaries. They are licensed to distribute SAP products to customers in certain territories. SAP is listed in several exchanges, including the Frankfurt stock exchange and NYSE, under the symbol SAP. (About SAP AG).

SAP Financial Supply Chain Management (SAP FSCM) is suitable for modules and applications to provide a solution for improving company's AR processes. It provides

functional electronic billing, managing billing disputes, collection management and credit risk management. (Rathi Nilesh.) The basic purpose of SAP FSCM is to improve the efficiency the teams of the accounts receivable and accounts payable which leads to an improvement of the business cash flow. (Chalfen 2010).

SAP FSCM contains:

- SAP Credit Management
- SAP Treasury and risk management
- SAP Biller direct
- SAP Cash and liquidity management
- SAP Collection management
- **SAP Dispute Management**
- SAP In-house cash (Rathi Nilesh).

SAP Dispute Management tool can be used to manage company's open accounts receivables (AR) items. With the help of Dispute Management tool it is possible to track, resolve disputed AR items and create dispute cases. (Dispute Management.) Dispute cases can be solved in cross-departments due to its visibility. All the related documents such as the accounting document of the dispute cases are linked. Dispute cases can be forwarded to the right persons for clarification which inevitably leads to a faster resolution. Furthermore, dispute management is integrated with AR so that the dispute cases are updated automatically. (iFSCM 2009.) Basically it helps streamline the accounts receivable process and enhance the customer relationships.

Through SAP's correspondence option it is also possible to inform customer about their dispute cases either automatically or manually. In order to create a better customer relationship it is possible to add text as detailed information for the customer to understand the dispute case.

SAP claims that companies that use SAP Dispute Management have reduced their daily sales outstanding by 20%. (SAP Dispute Management.) Nowadays, the dispute resolution process is a time-consuming, expensive and troublesome process. SAP has evaluated that solving one dispute case in Europe costs about 128EUR and can be

climbed up to 640EUR. By using SAP Dispute Management, the process of dispute resolution can be structured and streamlined and processing time can be significantly reduced. The main business benefits are improved Daily Sales Outstanding and liquidity. (Dispute management).

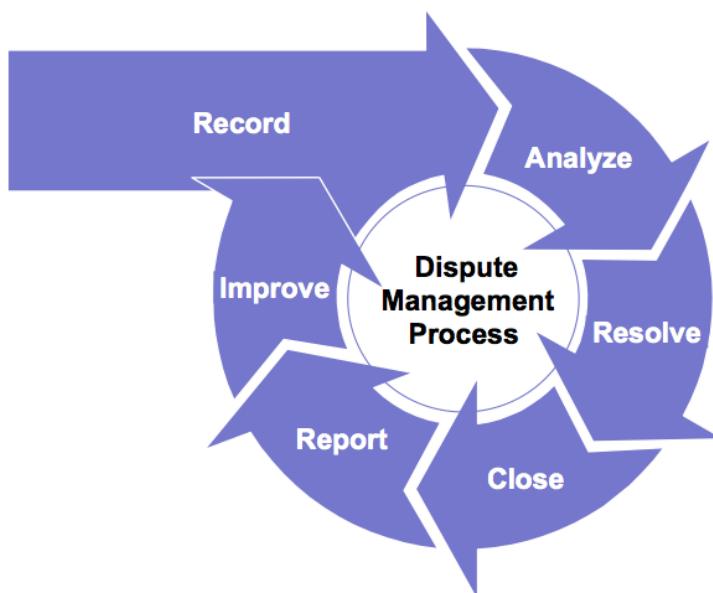
A Dispute case is an electronic file that collects relevant information and displays the found information in a structured form. A dispute case has attributes such as the reason for the dispute, the dispute's priority and the customer contact information. In addition, the disputed amount, relevant payments, credit memos and write-offs can be found from a dispute case. Dispute case can be created manually from a specific financial transaction in SAP but it can be created automatically if wanted. When creating a dispute case, the application automatically fills in the fields concerning the amount. As the case is created the application links all information for the disputed transaction to the dispute case. This information includes customer name, invoice number, amount and all relevant billing documents. These are accessible through the dispute case. Figure eight presents these features. (SAP Dispute Management).

The screenshot displays the SAP Dispute Management interface. At the top, there is a toolbar with icons for 'Attributes', 'Void', 'Add Open Items', and 'Actions'. Below the toolbar, the 'Header Data' section is visible, containing the following information:

Title	8100010595M	Case ID	275
Customer	[Redacted]		
Case Type	ZFDM	User-Changeable ...	External refer. 8100010595
Category	Shipping	Reason	Docu-Invoice not rece...
Processor	V SMAENMARI	Root Cause Code	[Redacted]
Status	Escalated	Priority	Low
Coordinator	V SMAENMARI	Person Responsi...	V SMAENMARI
Prom Pay Date	23.12.2011	Escalation Reason	[Redacted]
Process. Deadline	25.12.2011	Disputed Amount	[Redacted]
Planned Close D...		Paid	0,00
Orig. Disp. Amt	[Redacted]	Autom. Written Off	0,00
Credited	0,00	Created On	12.12.2011 16:27:50
Cleared Manually	0,00	Changed On	12.12.2011 17:10:15
Currency	EUR	Closed At	
Created By	V SMAENMARI	Telephone No.	
Changed By	WF-BATCH	Fax Number	
Closed By		Ctry of Fax No.	
Contact Person			
e-mail			
CCRP Number			

**Figure 8.** SAP Dispute case. (Case company`s SAP Dispute case).

Dispute Management process covers six basic steps. The figure nine introduces these steps. The first step is Record. It means that all dispute cases have to be recorded/logged to ensure a full transparency. Disputes can be identified through different channels for example preventive calls, overdue collection process or incoming payments do not match. When a dispute case is saved it can be assigned to a responsible person called Processor whose work is to solve the dispute case.



**Figure 9.** Dispute Management process. (SAS LC Solution).

When analysing dispute case a right reason code should be maintained. The reason codes are:

## **1 Goods & Services**

### 1.1 Quantity

1.1.1 Goods/Services not delivered

1.1.2 Goods/Services partially delivered

1.1.3 Excess amount delivered

1.1.4 Wrong goods delivered

### 1.2 Timing

1.2.1 Goods/services (partially) delivered too late

### 3.1 Quality



1.3.1 Goods/Services with defects/deficiencies

## 2 **Customer**

2.1.1 Liquidity

2.1.2 Problems of liquidity

2.1.3 Bankruptcy

2.2 Incorrect payment

2.2.1 Missing payment

2.2.2 Payment to another unit

2.2.3 Unexplained payment

2.2.4 Payment for pro-forma invoice

2.3 Legal

2.3.1 No formal contract

2.3.2 Regulatory approval pending

2.3.3 Pending litigation

## 3 **Documents**

3.1 Timing

3.1.1 Invoice not received

3.1.2 Bank guarantee not delivered

3.1.3 Incorrect invoice due date

3.1.4 Invoice already paid

3.1.5 Duplicate invoicing

3.2 Quality

3.2.1 Incorrect invoice amount

3.2.2 Unjustified cash discount deduction

3.2.3 Incorrect VAT code/amount

3.2.4 Incorrect line item text (description of delivered goods/services)

3.2.5 Incorrect invoice address

3.2.6 Incomplete project documentation

3.2.7 Other missing information on the invoice

3.2.8 Incorrect freight amount

During the analysis, all relevant information needs to be gathered to achieve a position to resolve the conflict. Escalation is required, if the conflict cannot be solved. It means that a dispute case will be assigned to another person if the solution cannot be found.

Dispute cases will be resolved through a business unit or by SAS (Shared Accounting Services). All solutions need to be fully documented. All the related parties, which are the coordinator, processor and person responsible, should be informed about the agreed solution.

After the solution has been confirmed the dispute case can be closed. Closing of the dispute case should be possible only when the related open item is balanced in other words payment, credit note or write-off. This is done in order to check that the documentation has been done completely after the resolution. This way the process/business can be improved. It is noticeable that all dispute cases should be reported by informing overdue receivables caused by disputes/ total Accounts Receivables (AR) per month.

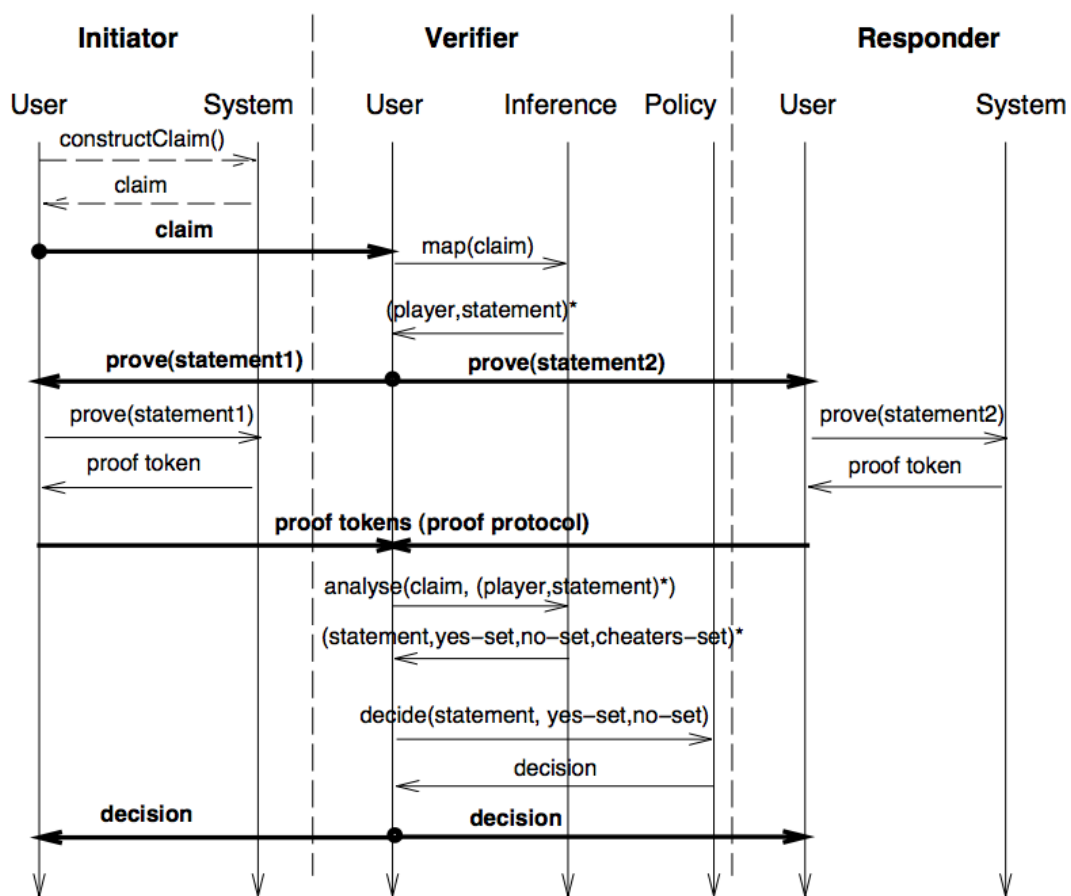
Improvement part includes root-cause analyses. It should be used to identify improvement areas for example internal processes or invoice quality. Collaboration in the improvement process between SAS and the business unit is required to identify improvement activities and verify feasibility. This can include for example quarterly review meetings among the SAS and the business unit. All employees involved in the AR process should participate in the improvement process. The number of gross improvements should be measured once in a year to notice the progress. (SAS LC Solution).

#### 4.2. Control dispute cases

*"Conflict occurs when two opposing parties have interests or goals that appear to be incompatible." -- Richard Hughes*

One example arose from the payment systems. IBM's research laboratory invented a dispute resolution system for electronic commerce. Sometimes when payment is done

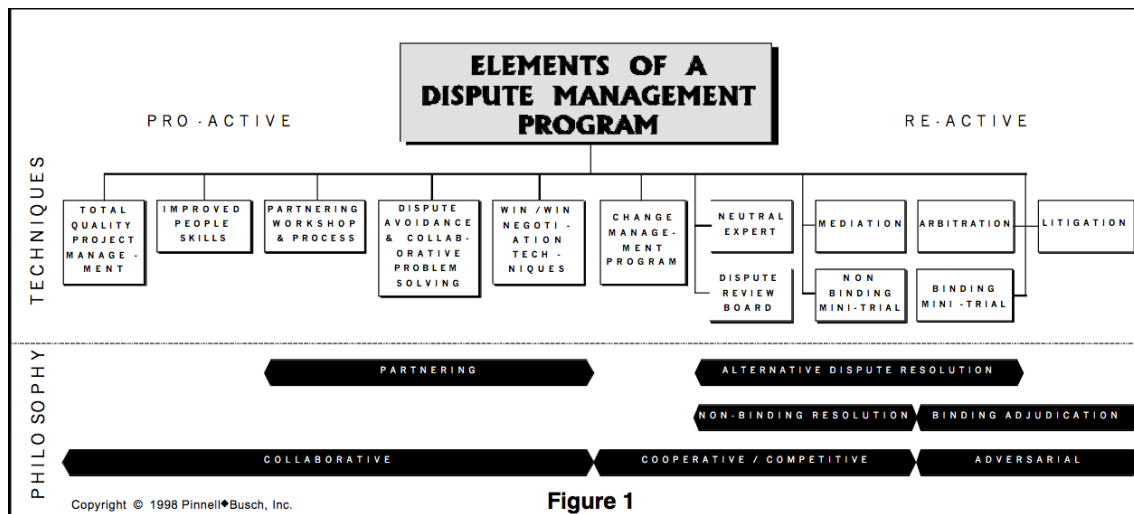
on the Internet the receiver does not receive the payment and this causes a dispute case. IBM has developed a logic using automated program which defines whether the dispute statement is true or false. Besides, there is a human-driven dispute resolution as well. By this it is meant that there are usually one or more persons who start the dispute and they are called initiators. Then there is a verifier whose job is to co-ordinate dispute handling and hopefully solves the dispute case. Then there is a responder who may be asked by the verifier to participate in the process. The picture below shows a dispute process in detail. Output of this process is the decision for the dispute case.



**Figure 10.** Dispute protocol. (Asokan, Herreweghen & Steiner 1998).

Another example is from an American project control Consultancy Company called Pinnel/Busch which has developed a dispute management program. It is focused on companies which have a tendency to argue with their customers. An example is a construction company which does not fulfill the customer's expectations and/or there are flaws in the building process. The picture below describes the pro-active and re-

active issues in dispute management, which companies should follow in their daily work.



**Figure 11.** Elements of a dispute management program.

The dispute management program includes an alternative technique for pro-active and re-active. It includes a philosophical part in which the collaborative problem-solving is encouraged and it has partnering techniques and alternative dispute resolution.

The most important technique for avoiding disputes is a better project management by all parties. It is important that the project will not be delayed, the project scope is well figured out, contract is covered and documentation of the project is done. Another issue is the relationships between people. It is possible to have training where people's work habits are learnt and understood. The main idea is to be able to work perfectly with all kinds of people. This way it is possible to build a relationship where both parties trust each other.

One essential issue in dispute management is pre-preventing action and cooperative problem solving. Upcoming problems should be reacted immediately. Projects' time schedules should be followed and tracking meetings should be held every month. Problems can be analysed together in a brainstorming session or analysing issues. In negotiation situation the solution should be beneficial for both parties. This is called a win-win technique. Nevertheless, if the dispute cannot be solved by negotiation then an

alternative dispute resolving (ADR) can be considered. Examples of these are Dispute review boards, neutral experts, mediation, mini-trials or arbitration.

Implementation of a Dispute Management Program (DMP) should be treated like all other projects. DMP is not just knowledge of concepts and techniques. It is also a well-planned and executed process and project to implement a customized program for every organization. In the beginning, analyses of costs and impacts should be done which clarify the causes that dispute management will have in organizations' functions. This way it is possible to see how extensively the dispute management program should be implemented within the company. It is also essential that the management commits to the project. Thus, it should follow the result that program is providing, give goals and make different measurements of the result. The project team should have someone to guide and to be there when needed because the team is responsible for organization's awareness of the new program and its goals. Therefore, the program training should be completed at an early stage. Then they can understand what it is about and participate in the development. Within a couple of months after the implementation, it would be good to analyse how it has succeeded. What problems have risen and what changes are needed in the program? When discussion has been done thoroughly new changes can be adapted to the program. This should be repeated every year to keep the program development on time. (Pinnel 1994).

#### 4.3. Key issues to control dispute management tool

*"It is a good and fair settlement when neither party likes the outcome, but agree to it." -- Unknown*

As mentioned in the previous chapter, the dispute management should be committed tightly to the program at a structural level. Company's whole organization should have internalized that everyone participates in the dispute solving and prevention of them. Skills and resources should be in place to manage and resolve disputes. Also designing, system maintaining and continuous improvement need to be handled. In order to

improve policies and procedures that foster a dispute management, information about the disputes should be thoroughly analysed. Causes of disputes should also be investigated to enable rectification and to improve policy and procedures to prevent reoccurrence. All this would not happen without the support from the management. Management should understand, promote and be responsible for the dispute management. They should communicate with all employees and stakeholders.

At an operational level, clearly defined strategies help recognising and preventing dispute cases. Also defined procedures for handling disputes in daily operating procedures will also cover report requirements. Records should be kept of dispute cases, outcomes and the applications of the system. These records should be analysed to identify system problems or risks. Besides, the dispute cases should be categorized and investigated to determine their root cause, rectification should be enabled and practice improved towards the dispute prevention. Furthermore, all dispute cases should be internally reported to the management.

At a maintenance level dispute management should be trained to the personnel and training should be ongoing. Dispute management should be visible and communication should be open. Regular communication is necessary to maintain awareness of dispute management issues. Website of dispute management should include information about dispute management and its process. This helps monitoring and review to ensure effectiveness and applicability. Also appropriate reporting gives useful information for the users. (ACT Accreditation and Registration Council).

## 5. CASE COMPANY X OVERVIEW

### 5.1. Presentation of the Case Company X

The case company is a global company with over 100,000 workers all over the world. Its main sector is in technology industry. Case company is a technology concern whose products, systems and services are improving company's competitiveness in industry and energy in an environmentally-friendly way. Concern's aim is in sustainable development, which means that it is considered how products are designed, produced, how to work with suppliers and how to prepare for risks and opportunities.

Nowadays, the case company's goal is to respond to the customer needs and environmental issues are a part of the production development. Company is continuing to develop its core competence with customizing the products for customers' needs. It is vital to be close to the customer. The case company is changing rapidly because the latest technology needs to be provided and the field of technology is one of the most quickly developing in the world. Case company's strategy is to work ethically and to have specialised personnel. (Case company X shortly 2011).

The main focus of this research is in three different business areas. Those areas are related to service, project and product business. Service related business unit's mission is to increase customer's productivity with the help of systematic and cost effective maintenance. It is also focused on developing production and energy effectiveness. (Communication manager 2002.) When this is looked from the dispute management's point of view, service is that kind of business where misunderstandings and unclear situations tend to happen between the customer and the service project manager. Service, as the name suggests, is a business area with no specific product that customer receives. It is the work that Service does for the customer, and sometimes it is not fully clear to the customer what to expect. This might lead to misunderstandings, which might cause a dispute scenario. (Controller A 29.8.2011).

Project related customers are basically from different fields of industry, electric utility, power companies, machines, equipment manufacturers and electronic installation companies in Finland, other Scandinavian countries and other export countries, mainly countries from the Far East, development cooperation countries and neighboring countries of Estonia and Russia. Automation projects for distribution networks are primarily delivered through approximately 40 Local Engineering Centers (LEC) all over the world. (Case Company X instructions 2011.) Project related business unit tries to prevent Dispute cases already when signing the contracts. A contract is very detailed and leaves no questions. The project manager usually meets the customer personally and works very closely in the project. This helps in communication so disputes are likely to be avoided. Dispute cases usually exist when customer wants to change something in the order. They need to have an agreement that customer has to assign additional change contract if he wants to make changes because until the change request is written, customer's wishes will not lead to subsequent actions in the unit. (Controller C 24.8.2011).

Product sales business consists mainly of product sales and they are also practicing business within the case company. They have Customer Call center in active use. The purpose is to make it easier for the customers to contact the company. Customer Call center is open 24 hours seven days a week. There is a certain phone number which customer dials if he/she does not reach a certain person. There will be an incident request opened and will be forwarded to the right person within the company. The customer may contact Customer Call center also via e-mail and then the e-mail will be delivered to the right person. (Customer service center 2011.) When dispute management point of view is considered, the product sales is monthly following overdue invoices and trying to solve them with the customer. They are already using reclamation tool for customer reclamations. This means that they already have the culture of helping and responding to customers which affects positively.



## 5.2. Case Company X before SAP Dispute Management

The definition of a dispute case is sometimes very difficult. At first, it is only an overdue receivable. When the company finds out why the customer does not pay, the situation becomes a dispute.

Dispute Management is very different in different business units. Especially if the unit is Project, Product or Service related business unit. Unit where big sales orders occur rarely have more intimate contacts with the customers than a unit where they sell so called bulk material. Usually project managers, sales personnel and controllers handle dispute cases. A dispute case might not occur right away if the customer does not show dissatisfaction. In this situation the business unit or SAS (Shared Account Services) personnel contacts the customer and asks the reason for unpaid invoice. This way the company gets some explanation of why the invoice is unpaid. The answer is written down in Microsoft Excel Worksheet, paper or in person's own database. However, one problem in this is that other members of the unit do not know the answer and other way round.

Once in a month all the business units should run two or more days' overdue invoices and send them in Excel form to SAS. SAS will gather all these and units' explanations about the overdue invoices. Then they form one report and send it to manager's support. SAP Dispute Management has the same reason codes for the dispute cases. There has not been any compulsory need to use these codes so the use has been minor in Business unit's side. Business units have usually been informing with Excel about the reasons for disputes or if there is, for example, a collect block due to customers handling procedure. Some of the unpaid invoices the business unit could not have explained. (Collection specialists 2011).

Business legal point of view if customer is not paying the invoice and it seems that negotiations to solve dispute case is not helping then dispute will go to arbitration. This happens actually quite rarely because it is very expensive and it is never clear that win

will come. Arbitration is neutral official board, which handles dispute cases quickly and fast. (Credit Manager, 2011).

#### 5.2.1. Service related business

SAS sends a list of overdue invoices to the sales assistants who send the list forward to the right sales person. The sales person's task is to negotiate with the customer about how to solve the dispute case. Controller A estimates that there have been approximately 20 dispute cases in one year. It takes approximately three hours to handle one dispute case by one employee. Controller A thinks that the biggest root cause reasons of dispute cases are missing documentation, customer's payment problems, customer's slow bureaucracy, disagreement with the payment terms or obscurity about the performance or the contract. Controller A sees that SAP Dispute cases should be opened up with SAS. (Controller A 2011).

#### 5.2.2. Project related business

In project business world the project managers are responsible for negotiating with the customer if a dispute case comes up. This happens because the project managers work very closely with the customer. In addition, the management will discuss internally but there is no follow-up about the most likely dispute cases. Controller C estimates that there are approximately eight dispute cases in a year. The handling time of a dispute case varies a lot: sometimes it takes five employees and five days and sometimes just one phone call to the customer. Controller C estimates the main root causes for dispute cases. One root cause is that the customer has liquidity problems and is not capable of paying. Another root cause is that some customers have their own payment days, which are not the same as the invoice due date and this obviously causes confusion. Controller C notes that SAP Dispute cases can be opened manually within a business unit when project manager indicates that to be done. (Controller C 2011).

### 5.2.3. Product related business

In product related business world sales people are responsible for negotiating with the customer about the dispute cases. Product business unit has paid attention to the overdue invoices and have collected them independently. Controller B estimates that there have been 80 dispute cases in one year. One employee solves one dispute case in approximately an hour. Controller B estimates that there are three main dispute root causes which are that the customer has not received some parts and they are still missing, delivery has been late or there has been mistake in the invoice. Controller C notifies that controllers in the unit could open SAP Dispute cases manually. (Assistant controller B 2011).

### 5.3. Customer Complaint Resolution Process

As early as the 1990's the case company X has had a tool called CCRP which is an abbreviation of Customer Complaint Resolution Process. Company's internal and the 3rd party customers can use CCRP as a reclamation tool. It is an Internet based tool. After filling a reclamation form online, it will immediately find its way to the right business unit and it is handled within 72 hours from receiving it. After the reclamation is handled, an email will be send to the customer informing him/her what will be the following actions. CCRP tool sends a reminder message to the resolvers after the deadline, if the email has not been sent to the customer. The meaning of this tool is to let the customers know that there is actually something being done. CCRP is visible for everyone, so everyone can see each other's complaints. CCRP tool also gives a report where employees are able to see how many complaints have been done, how many of them have been solved on time and how many of them have been answered. (CCRP 2011).

#### 5.4. Main goals in Dispute Management implementation

Strategy for solving dispute cases is to solve them personally with the customer. The wanted goal is to achieve a better relationship with the customers and to appear as a trustworthy and reliable associate. It is hoped that SAP Dispute Management tool would have an effect on the whole order to cash chain, thus, the problems would be more visible within the chain. The business objective is to improve the process efficiency of Collections from the customers. Related to Accounts Receivables function can be raising, handling and closing Disputes and thereby increasing cash flow and profitability on customer accounts.

Other benefits and goals for Dispute Management tool are:

- To reduce days sales outstanding
- "All at once" – goal, to prevent to that payment is been asked repeatedly from customer
- To get better reports from dispute cases. Hopefully now when all are using the reason codes we would find out the real reasons behind disputes.
- To motivate employees to use tool actively.
- Dispute cases are reported when there is one. Assumption is that the amount of dispute cases will increase after the implementation.
- It is required to have full documentation in dispute case about activities, actions and communication to enable better transparency.
- To control dispute cases better
- To cut costs and risks
- Common process to handle 3rd party dispute cases within the Case Company.
- Harmonized process brings benefits: employees share lessons learned and best practices.
- Instant reaction to dispute cases.
- Customer satisfaction will be better.
- Cooperation with customer and loyalty will be more advanced.
- Ability to solve dispute cases will improve process efficiency.

- Continuing improvement (for example reason code analyse).
- Courage to have better solutions to dispute cases
- Management support to solve dispute cases.
- Create ownership for the external dispute management
- To carry out continuous improvement (SAP Dispute Management 2011).

### 5.5. Benchmark

Benchmarking is an interactive learning method where company learns from developed role models and thus the company gets the tools to improve its own processes. Benchmarking means comparing, evaluating and learning and it is also a constructive way to question own processes and methods. Benchmarking is not about copying other company's ways of work, it is about getting ideas from another company. Benchmarking is also about making other company's success useful in its own processes. The challenge is how to observe the strength of the best practice and how to make it useful. A successful leader will foresee tomorrow.

The most common ways to practice benchmarking are statistic comparing, process, competitor, dyadic and partnership benchmarking. Prerequisites for success in benchmarking mean that following issues should be paid attention to: One, the management should support the change and process development. Two, starting points should be the company's mission, vision and strategy, which are based on company's values and culture. Three, process needs to be clearly described and it should match with the practice to understand the process tracking and measurement procedure. Four, the project plan of the benchmarking project should be conveyed. Five, all the right persons should be involved in the benchmarking process to have the necessary knowledge about the procedure. Six, the benchmarking process should be proceeded with small steps and subjects and the rules has to be agreed with both sides.

Benchmarking has goals and benefits. Usually company has a goal and needs to develop its processes. Also customers, other stakeholders and changing conditions are setting

new demands. Benchmarking is a good way to develop processes when the goal is to improve the performance instead of covering up mistakes. Benefits will grow when the endeavour is to have an extensive functional development. Its strengths are that the company will get a full clarification about the process and where it lies, all participants will make a commitment to develop the process, networking will be advanced, a possibility for a fast development will be given and good working ways and habits will be spread from company or industry to another.

Benchmarking process can be accomplished by doing the Plan – Do – Check – Act – process improvement technique, which was introduced in chapter 3. (Hotanen, Laine & Pietiläinen 2001: 7-14).

## 5.6. Benchmark Company Y

Company Y has implemented SAP Dispute Management in June 2011. Company Y's business idea shares the common ground with the Case Company X. I investigated case company Y's way to use SAP Dispute Management by reading their user instructions and interviewing two employees in their company via email asking some questions and their feelings about the SAP Dispute Management. I made a comparison between the case company and company Y and then I drew some conclusions if the case company could learn or benefit something from the Company Y.

Company Y has been using Dispute Management for eight months now. The question is that what benefits have they noticed? When looking from the end-users' perspective there has not been any benefits and the reason for this is that the end-users do not understand why it is important to use SAP Dispute Management tool. This quote is one of the answers: "Customer does not pay any faster with this tool". There has also been a lack of user instructions, employees do not have any motivation to use the tool and the system has not been working properly. Company Y's management think that they have reached a reduction in sales outstanding compared to the time before SAP Dispute

Management but they do not have any measurements from it so it is just an assumption. They have spent time correcting and streamlining the process afterwards. They have much better control, focus and everything is stored in one place. There is an increased focus on overdue invoices and implementation of Dispute Management has decreased the problem-solving time. However, the most commonly used root cause code in Company Y is “Missing payment”. (Company Y, Controller & Application owner 2012).

When SAP Dispute Management processes are compared, some differences came out. Please see the attachment number three for case company process overview. After a Dispute case has been opened a workflow is triggered: for case company X the first reminder to the processor will be sent after **five days** of processor’s inactivity. For case company Y the same reminder is sent after **three days**. Case company X; after additional 5 days of inactivity (**10 days in total**) after receiving the Dispute case from the processor, an email is sent to the Person Responsible. Case company Y: After additional 3 days of inactivity (**6 days in total**) after receiving the Dispute case from the processor, an email is sent to the Controller. Last escalation workflow will be send in case company X after three days (**13 days in total**) and person responsible acts as a processor. Same escalation in case company Y will be send after three days (**9 days in total**) and controller acts as a processor. In this comparison it is noticeable that case company Y has faster workflow then company X. As a Person Responsible Company Y is using Controllers and Company Y is using profit center owners.

Case company Y’s root cause code is default 0000 when opening up a dispute case. The purpose of this is that the processor will fill it later, yet the coordinator should not fill it up. Also, the actual root cause code is filled up later by the processor. Here can be measured how much there is variation between the root cause code and the actual root cause code. In the case company X, it is mandatory for coordinator to fill the reason code of the dispute case. On a later stage the processor will fill in the actual root cause code. By doing this it can be measured if the first reason code is the right one and how much variation there is between the root cause code and the reason code.

A dispute case has a field called *priority*. It is automatically in the dispute case if the case is valuable enough and both companies use it. The purpose of Case Company Y is that the processor can change it if he/she thinks that it should have a higher or lower priority. After changing a priority, an email will be sent to the coordinator who has opened up the dispute case. Case company X does not have any additional purpose for this field at this point, the only meaning is to inform of the importance.

I think that the case company Y is still under a process of developing SAP Dispute Management as a user friendly tool for the end-users. After a year the situation with the new tool is hopefully better and new benchmarking should be done.



## 6. CASE STUDY

This case study is based on the fact that the case company uses SAP widely. It is natural that all important business related activities would be in one system instead of many additional systems, not to even mention about Excel. It was natural that after implementing SAP Credit Management, Dispute Management took place. SAP Dispute Management was implemented with tight schedule in three months. Gate model was used as a structure of the project. External Consultant Company executed the realization. The project baseline was copied from Case Company Y and there was a delta blueprint done based on Company Y's solution. The testing of dispute management was executed in case company's SAP testing environment. Implementation was accomplished according to the schedule.

In this chapter the research process, interviews and research findings are presented. The aim is to present the Dispute Management implementation from end-user perspective through interviews and larger questionnaire called Balanced Critical Factor Index method. Research findings will be explained and analysed.

### 6.1. Reached process

As a research target I selected the Case Company X and three Business Units from the Case Company X. These units have different business activities as well as different kinds of dispute cases. Companies are united with service, project and product business sales. As a research questionnaire I used **two types of interviews**. First I interviewed three controllers from different business areas. The interviews were conducted before and after SAP Dispute Management implementation. As the second questionnaire I did a survey. I emailed 53 end-users and asked same 19 questions and the answers were given on a scale from one to ten. The results of these interviews are explained in chapter seven. The results of interviews with the three controllers before DM implementation are presented in chapter five and interviews after DM implementation are presented

later in this chapter. The survey results are presented in a chart form. Research is also based on my personal feelings and observations that I have made during the project from other people who were involved in this project as well as from the end-users. As a research material I have used Case Company's intranet website, Internet, library books and thorough interviews. This research aims to take advantage from theoretical framework and use it when analysing SAP Dispute Management. In the empiric part of the thesis the benefits and challenges of SAP Dispute Management implementation will become more visible. It is also studied that how the minimizing dispute cases and solving them quickly and easily impacts on order to cash process and makes it more efficient.

## 6.2. Research interviews

Research interview is a theme interview, except that the questions were done beforehand. Theme interview is a mix between form and open interview. (Hirsijärvi, Remes & Sajavaara 2009: 208.) During the summer and fall 2011, I prepared six questions, which I sent beforehand to the interviewees. Then I scheduled a meeting with each of them individually. First I explained to them the basis of SAP Dispute Management and then I asked questions to examine how they handle the disputes at that time. Answers are described in chapter five. Interviews were held separately and the atmosphere was very open, so that the interviewee could ask additional questions about the Dispute management. We speculated how Dispute management will fit into our organization. For example, Controller from service related business unit told that they really have an urgent need for this kind of support tool. He also stated that SAP Credit Management, which was implemented in October 2010, is a really useful tool because it forces to check the finance situation of the customer before selling anything. All three interviews took approximately one hour. In February 2012, when SAP Dispute Management had been used for two and half months, I interviewed the same three controllers again in order to find out their feelings about the new tool, as well as the benefits and problems they had faced. Answers are shown below.

### 6.2.1. Service related business

Controller A has noticed that over due invoices are reduced but it is still early to estimate if there time saving when handling dispute cases with new tool. Controller A estimates that reason why dispute cases are coming are still same as half a year ago, there are misunderstandings in contracts and deliveries and disagreement with payment terms. Unit is however very motivated to use SAP Dispute Management and open dispute cases themselves. New tool has been widely trained to unit and organization sees it as advantage. They have also noticed that dispute case process workflow can be used internally as an approval workflow which is big help for them.

As a benefit controller A sees that it is good that Dispute Management tool sends emails to responsible persons. This way it is always know who is responsible and should do something about the dispute case. Controller A points out that it would be good that SAP would send reminder emails for example every 10<sup>th</sup> day to the Processor as long as customer hasn't paid the invoice. Now it sends reminder emails only if Processor hasn't fill the root cause code to the dispute case.

There are still lots to learn how to use dispute management tool and it is not helping that dispute cases comes quite rarely to the same person so it is easy to forget what was trained. Extra training might not be bad idea and training should happen so that end user can also create dispute cases themselves and just watch how someone else is doing. Also reason codes should be clearer, for example the code *Missing payment* is not so descriptive.

Controller A points out also that in case company selling comes always as first priority because its important to get profit and after that comes worrying if customer has paid the invoice. This might be one reason why sales persons don't have so much time to focus on handling dispute management. (Controller A 2012).

### 6.2.2. Product related business

Product related business unit has a history of handling dispute cases and overdue invoices, so controller B stated that with SAP Dispute Management tool, it takes the same amount of time to handle the dispute cases as it did before. Of course, at the beginning, when SAP Dispute Management was implemented, it took time to learn how to use the new tool. Luckily, they held internal training sessions. Controller B is convinced that in the future the dispute cases will be solved very quickly because everyone is familiar with the tool and all cases are in one place, which is SAP.

Product business unit has more domestic than foreign customers. At this point the biggest root causes for dispute cases, according to the controller B, are due mistakes in their own order handling, customer has financial problems or customer decides to extend the payment time. Controller B notices that the dispute cases will be opened now and in the future within the unit if the customer informs that he is not willing to pay for some reason. Customer should not be involved in the internal dispute processing.

The most useful benefit, according to Controller B, is the transparency; no more emails are going back and forth because all dispute cases are in SAP. All related information can be written straight to the dispute case and every party can read and comment on the dispute case. Another benefit is that we get reports from all dispute cases root cause codes and this way it is easy to recognize the reasons of dispute cases. Disadvantage is that if a dispute case is closed and no one had the time to add the root cause code, it is not possible later when the case has been automatically closed. Controller B sees also another disadvantage and that is that SAP opens automatically dispute cases which are invoices that are more than 21 days overdue. Here lies a problem because some of the invoices might have small amount and if there are many of those dispute cases, they will fill up the sales person's (i.e. Processors) email and the processor has to go through them one by one, even if they are from the same customer and have the same root cause code. (Assistant controller 2012).

### 6.2.3. Project related business

SAP Dispute Management tool has been used for two and half months but project unit has had only one dispute case which they opened manually. They had the same difficulties in the beginning as the product business had. Project business has more foreign customers than domestic ones. Controller C notes that the biggest root causes for dispute cases are cultural differences; some countries are just not paying in time due to different reasons, the customers have also complained that they are missing documents and that is the reason why they are not willing to pay. Controller C believes that it would be better if SAS opened the dispute cases manually due to the lack of resources in the business unit.

Controller C also thinks that the biggest benefit from SAP Dispute Management is the dispute cases' transparency between SAS and the business unit. This reduces the unnecessary emails and helps if someone is on a leave. Controller C thinks that one disadvantage is that the instruction in PDF Document, which is also in Processors' email, does not describe properly how to proceed when handling the dispute case. Also it was difficult to choose one of the root cause codes because they are too vague. Please see the root cause codes, which are described in chapter 4.1. (Controller C 2012).

### 6.3. Balanced Critical Factor Index method

The purpose for this questionnaire survey is to have a perspective of the end-users of the Case Company X and how they feel about the new tool SAP Dispute Management. To complete this I used Past & Future Balanced Critical Factor Index (BCFI) measure tool. It was developed by Rajala & Takala in 2009 and Nadler & Takala 2010. The purpose of this measurement is to find out what are the most critical attributes in Dispute Management process. It also helps the management in the fast decision making.

BCFI research includes three phases. The first researcher gets familiar with the current situation and observes the processes in the company. The second phase is to create

attributes, which are the most important factors in the process that is under the research and then form a questionnaire with these attributes. The third phase is to analyze the information by using analyzing tools and formulas. (Leppiniemi & Takala). Questionnaire is a structured interview and so called form interview. (Hirsijärvi et al.) It is in Excel form and asks the past and future point of views of the attributes. In this research, attention is to see which attribute has the worst experiences, because then it is easy to see what should be improved. Attention will also be focused on seeing which attribute should be developed for the future.

One week before the start of the Dispute Management implementation, I sent the first part of the questionnaire (please see appendix 1) to 53 end-users. I received 11 email answers. The questionnaire inquired only the expectations towards the new SAP Dispute Management tool. I sent the questionnaire part two only two months after the implementation (please see appendix 2). The second part inquired experiences, direction of the development compared to the time before the SAP Dispute Management tool and direction of the development after one year.

Phase three includes calculating the results using Past & Future Balanced Critical Factor Index (BCFI) and Past & Future Scaled Critical Factor Index. When the results are scaled it is easier to compare and analyze results with each other. Basically the lower the value of the attribute is, the more critical it is. The calculation is done based on this formula:

$$SD \text{ expectation index} = \left( \frac{SD \text{ of expectation}}{10} \right) + 1 \quad (1)$$

$$SD \text{ experience index} = \left( \frac{SD \text{ of experience}}{10} \right) + 1 \quad (2)$$

$$Performance \text{ index} = \text{Average of experience}/10 \quad (3)$$

$$Importance \text{ index} = \frac{Avg. \text{ of Expectation}}{10} \quad (4)$$

$$\text{Gap Index} = \left| \frac{\text{Avg.of experience.} - \text{Avg.of expectation}}{10} - 1 \right| \quad (5)$$

$$\text{Direction of development} = |(\text{Better \%} - \text{Worse \%})/100 - 1| \quad (6)$$

BCFI is based on below formulas and counted with this equation:

$$\text{BCFI} = \frac{\text{SD expectation index} * \text{SD experience index} * \text{Performance index}}{\text{Gap index} * \text{Direction of development index} * \text{Importance index}} \quad (7)$$

**Table 1.** BCFI calculation model. (Leppiniemi & Takala).

#### 6.4. Results of Balanced Critical Factor Index method

Attributes					Direction of development compared to past			Direction of development compared to future		
	Average of expectations	Standard deviation of expectations	Average of experience	Standard deviation of experience	Worse	Same	Better	Worse	Same	Better
Dispute Management point of view										
Time to handle dispute cases will be reduced after implementing SAP Dispute Management tool	7,27	1,90	6,00	2,36	0,00%	9,09%	90,90%	0,00%	9,09%	90,90%
Real reasons behind dispute cases will be find out	8,18	1,07	6,54	2,38	0,00%	36,36%	63,63%	0,00%	9,09%	90,90%
SAP Dispute Management tool will help in customer relationship management	6,27	2,28	6,09	2,34	0,00%	36,36%	63,63%	0,00%	9,09%	90,90%
SAP Dispute Management will help in risk management	6,91	1,92	6,54	2,29	0,00%	36,36%	63,63%	0,00%	9,09%	90,90%
SAP Dispute Management tool will help with unclear dispute cases	7,54	1,75	6,54	2,38	0,00%	36,36%	63,63%	0,00%	9,09%	90,90%
SAP Dispute Management tool will reduce days outstanding	7,91	1,22	6,90	2,50	0,00%	27,27%	72,72%	0,00%	9,09%	90,90%
SAP Dispute Management tool helps with customer satisfaction	6,91	1,70	5,81	2,52	0,00%	45,45%	54,54%	0,00%	18,18%	81,81%
Cost saving will be accomplished	6,64	2,11	6,72	1,84	9,09%	18,18%	72,72%	0,00%	18,18%	81,81%
I have great interest to use Dispute Management tool	8,10	2,25	7,36	2,46	0,00%	18,18%	81,81%	0,00%	18,18%	81,81%
<b>SAP Dispute Management tool</b>										
SAP Dispute Management support is easily available	7,27	2,19	7,09	1,97	0,00%	9,09%	100%	0,00%	18,18%	81,81%
I have good acknowledgement of SAP Dispute Management tool	7,36	2,15	5,63	2,54	0,00%	18,18%	81,81%	0,00%	9,09%	90,90%
I can trust SAP Dispute managements information	8,45	1,03	8,00	1,26	0,00%	9,09%	90,90%	0,00%	9,09%	90,90%
Tool is enough inclusive (I find all necessary information)	7,27	1,90	6,81	2,04	0,00%	18,18%	81,81%	0,00%	9,09%	90,90%

Tools processes and instructions are understandable	7,54	2,29	5,90	2,42	0,00%	27,27%	72,72%	0,00%	9,09%	90,90%
Tool is useful for management reports	7,54	2,33	5,63	3,13	0,00%	18,18%	81,81%	0,00%	9,09%	90,90%
Tool reduces "double work"	7,63	2,76	7,72	1,61	0,00%	9,09%	90,90%	0,00%	9,09%	90,90%
Tool makes it fast to solve dispute cases	6,91	2,11	6,54	2,25	0,00%	9,09%	90,90%	0,00%	9,09%	90,90%
Tool helps to harmonize dispute management process	8,18	1,07	6,90	1,70	0,00%	18,18%	81,81%	0,00%	9,09%	90,90%
Business units open dispute cases themselves	5,72	2,72	3,72	2,72	0,00%	27,27%	72,72%	0,00%	9,09%	90,90%

**Table 2.** BCFI table results.

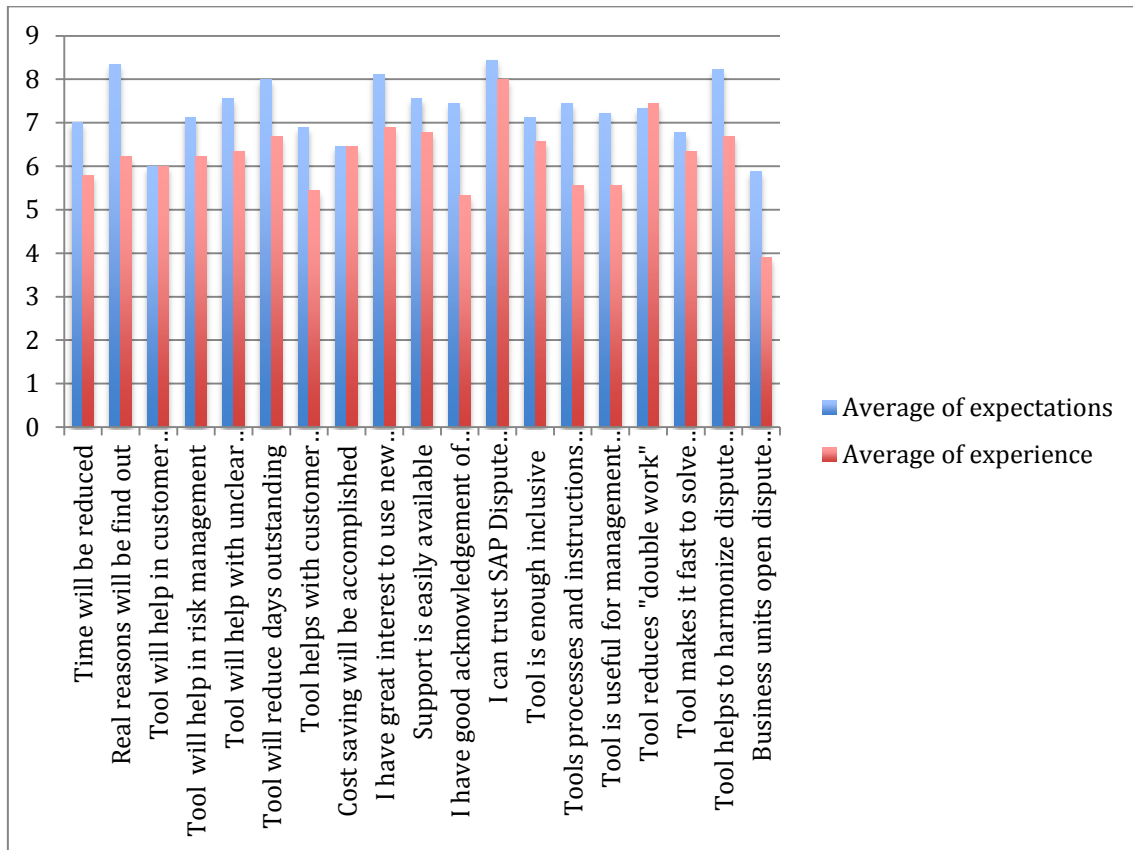
This table is result of Balanced Critical Factor Index method questionnaire one and two. Questionnaire is gathered from 11 end users and SAS collections specialists' answers. It seems that expectations have higher average than experiences. Biggest difference between expectations and experience is that "Business unit open dispute cases themselves". I think this can be explained with attribute "I have good acknowledgement of SAP Dispute Management tool" – here expectations were higher (7,36) but experience decreased to (5,63). It seems that end users don't yet have complete knowledge for the tool. There are also doubts if real reason behind dispute cases will be find out. This is understandable because Dispute Management has been used only almost three months. It takes time to get results from the tool. First priority at this point is that everyone will learn how to use the tool to get most benefit out of it.

Expectations were most highest in attributes: "I can trust SAP Dispute Management's information and tool helps to harmonize dispute management process. Lowest expectations were in that units would open dispute cases themselves, they prefer that SAS will open them. End users don't have high expectations that tool would make it faster to solve dispute cases or that there would be any cost savings or that Dispute Management tool would help in customer relationship management. These issues might be seen approximately after two years from implementation.

Two month's use of SAP Dispute Management tool has shown that end users think that they can trust tool's information, they still have great interest to use this tool, tool actually reduces double work and support for the tool is easily available, this is also better now compared to past before new tool. Experience has shown that end users



rather not open dispute cases themselves, tool doesn't help much in customer satisfaction, they don't have that good acknowledgement of SAP Dispute Management tool and tool is not so useful for management reports.

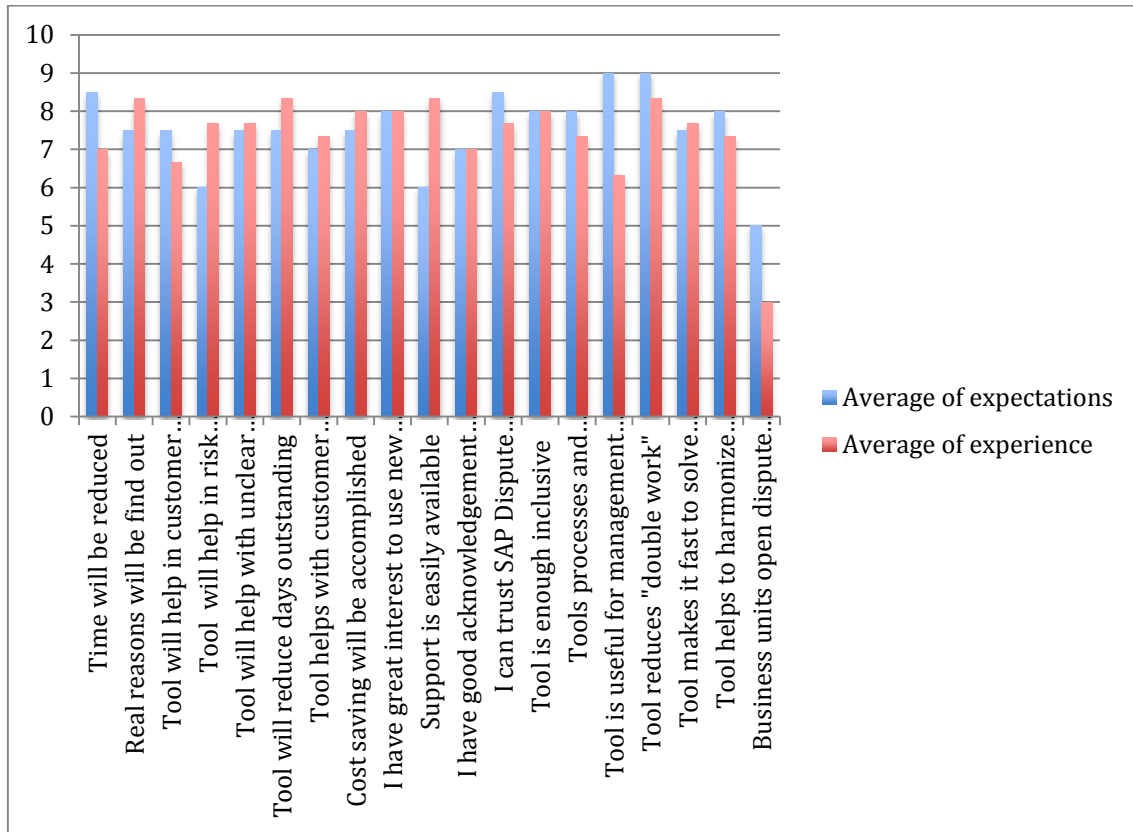


**Table 3.** BCFI chart. Expectations against experience. Results from unit's end users.

End user perspective most important attribute is that they can trust Dispute Management tools information. Experience has already shown that it reduces double work more than it was expected. This means that dispute cases are in one place and it reduces additional questions back and forward. Attribute: Tool is enough inclusive, had higher expectations than experience. This is interesting because I haven't got any feedback about that it doesn't cover everything. Only one missing part now is that we are not able to create dispute cases straight from credit memo invoices or from down payments but still end users haven't complaint about this.

There is 1.66 difference in expectations and experiences with attribute: Tools processes and instructions are understandable. Experience has lower average, which means that

end users have had troubles finding instructions and understanding them. Nowadays, people are very busy so it is needed to have simple instructions or then to have opportunity to learn by doing itself when someone is teaching same time.

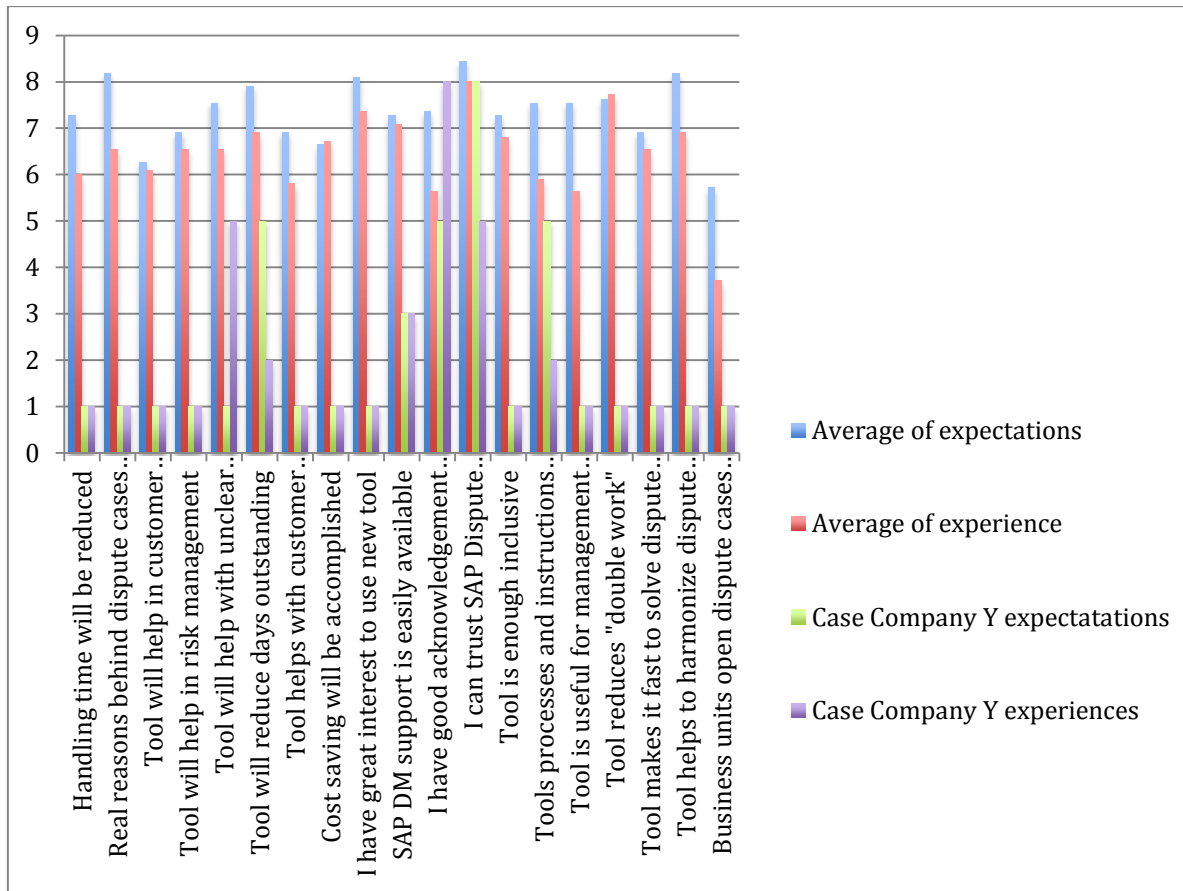


**Table 4.** BCFI chart. Expectations against experiences. Results from SAS collect team.

SAS collection department perspective the chart shows that most important attribute is that SAP Dispute Management tool reduces double work. Here expectations were little bit higher then experience has shown. Another important issue is that tool is useful for management reports. Difference between expectations and experience is 2.67. Experience is lower because at beginning report transaction in SAP didn't work well. Afterword's it was improved. It also takes time to have inclusive reports.

Surprisingly in attribute: Support is easily available have 2.33 better experience then expectations. Collection team uses Dispute Management tool daily, so it is understandable that it should work perfectly for them. They are also motivated to use tool, when considering attribute: I have great interest to use DM tool the expectations

and experience is 8 in both.



**Table 5.** BCFI chart. Case Company X and Case Company Y comparison.

This table shows Case Company Y expectations (green) and experiences (violet) added to Case Company X table (blue and red). Here we can see that Case Company Y didn't have high expectations for any of attributes, except for that they could trust tool's information, tool would reduce days outstanding, tools processes and instructions are understandable and end user will have good acknowledgement for the tool. Here expectations are lower than experience. This can mean that after eight month end user will have better understanding for the tool.

## 7. RESEARCH FINDINGS AND DISCUSSION

This chapter will discuss about research findings and answer to the research questions.

Research questions are:

1. How Dispute Management implementation was succeeded and what benefits was received?
2. How to impact whole order to cash flow to make it more effective, without causing disputes?

This chapter also compares the theoretical framework with the SAP Dispute Management process and considers positive and negative effects of Dispute Management for the case company. This chapter also evaluates the validity and reliability of the research, gives suggestions for future development, and discusses how to proceed with SAP Dispute Management.

### 7.1. Analyzing SAP Dispute Management implementation

The most important benefit, which all the end-users agreed, is the transparency. Now all the Dispute cases are visible in SAP, where end-users from units can comment and also a group from SAS can comment. If a customer calls, it is easy to open a dispute case or add information or reason code to already existing dispute case about why the customer has not paid. This reduces emails going back and forth and also avoids situations where two people would contact the customer about the same issue.

Another important benefit is that now everyone in the case company are using the same reason codes in the dispute cases and it is mandatory to fill one. This way there will be reports available from SAP informing which reason code was used the most. Please see the reason codes in chapter 4.1. After SAP Dispute Management had been used for two and half months the most commonly used root cause code of all the 500 dispute cases was *Missing Payment* (91 pieces). A report from SAP showed that at the moment there are only 252 open dispute cases and 34 of those dispute cases (13%) have root cause code *Invoice not received* and only 22 (8%) have root cause code *Missing Payment*.

Rest (77%) of dispute cases didn't have any root cause code. This means that no one hasn't updated root cause code, even they have received email requesting to do so.

It seems also that root cause code *Missing Payment* is too vague and it is too easy to choose that code if the end-user does not know why the customer has not paid. This can happen if a dispute case has been opened automatically and the end-user receives an email. He or she has got the training about dispute management and learned that they have to choose a root cause code to prevent more reminder emails about the dispute case.

The root cause code *Invoice not received* was used many times as well. It is company's internal problem and needs to be fixed immediately. Here I suggest to study Grace L. Duffy's Generic problem solving model. She presents the model in a book titled: *The executive guide to Improvement and change*. It starts with defining the problem, generating alternative solutions, evaluating and selecting an alternative and implement and follow up on the solution. It should also be remembered not to focus too much on fixing a problem, but to see the whole order to cash flow and improve the process so that it does not affect negatively to other processes. An example of this is Total Quality Management model in which all employees should be involved in achieving a common goal to improve the quality.

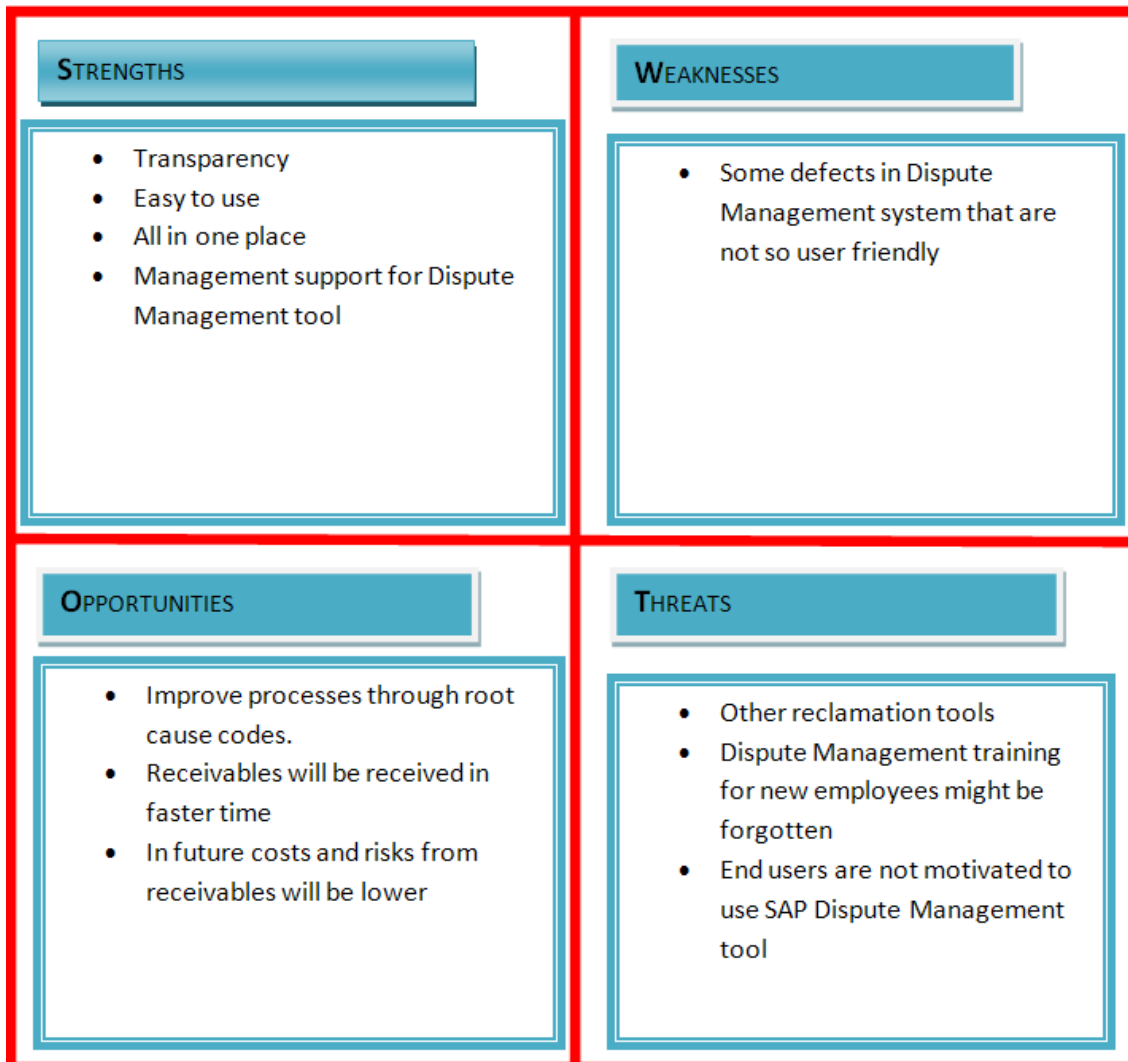
The expectations for the Dispute Management project were very optimistic and everything was done within the schedule. Testing of Dispute Management was little challenging; I think this is due to the fact that employees did not figure out who is responsible for testing this new tool. Project team sent emails explaining how business unit should proceed, but left decisions about the actual work distribution for the units. I think this caused confusion in some units and they did not react at all. This lead to a situation where everything was not tested and they were noticed after Dispute Management was in use. Another setback which occurred two weeks prior to "go live" was problems with authorizations because they were applied too late. When the new tool is activated into SAP, a list of all necessary transactions is needed then those with new technical role are added. All end-users need to apply for this new role, so they will

have authorities to use it in SAP test environment and again later apply for the role to the SAP production environment. This led to the fact that end-users did not have authorizations on time for the testing and if they had, there were still some authorization objects missing so he/she could not use SAP transactions properly. This is an important issue and can be used as lessons learned, next time authorizations will be surely applied on time.

Project team held five training sessions as a telephone conference and had video connection through web. Training included basic information about the basic idea of Dispute Management and actual guiding through SAP and how to handle dispute cases. Usually there were approximately 20 persons listening to training and at the end they did not ask much or demand answers. As an exception was when one of training sessions was in English and there were only two people in the meeting, they asked a lot of questions. This made me wonder about the other four training sessions; did people have questions but they did not dare to ask maybe because of the number of people listening to the same training.

There should have been more focus to promote Dispute Management to the end users. For example a plan how to teach employees and inform them with qualities that new tool will have. It's important that teaching is well organized.

A SWOT (Strengths – Weaknesses – Opportunities – Threats) analysis of SAP Dispute Management implementation is presented below.



**Figure 12.** SWOT for SAP Dispute Management.

The number of dispute cases increased after the implementation of SAP Dispute Management. Comparing January 2011 with January 2012 there was 83 per cent rise and when February 2011 is compared with February 2012 there was 128 per cent rise.

## 7.2. SAP Dispute Management opportunities

As Francis Buttle has stated in his book *Customer Relationship Management*; a trust is a very important issue when it comes to building strong customer relationships. Dispute Management is one way to improve the customer relationships. It obviously takes some time before SAP Dispute Management starts to pay off. SAP Dispute Management tool

should be seen as opportunity to improve processes. For example if a case company contacts with the customer and asks for the reason why he has not paid, customer tells that he has not gotten everything the company promised to send. Then the company creates a dispute case and adds a reason code *part missing* and eventually company notices the problem and does something to correct it. Later on, the customer notices that there are no parts missing anymore from the deliveries and customer becomes happier and more trusting. The idea of Dispute Management is to have flawless order to cash flow.

SAP Dispute Management can be seen as a customer relationship strategy. Storbacka & Lehtinen present strategies that company can relate to in their book *Customer Relationship Management*. My point of view in the implementation of Dispute Management can be seen as a part of the Zipper strategy. It means that the customer and company both adapt to each other's processes. Furthermore, the customer should be straightforward and inform if something was wrong with the order and then the company should listen and try to improve the process according to the customer's wishes. Storbacka & Lehtinen remind also that all departments should take equal part in the customer relationship development. This has a great effect on improving the Dispute Management's point of view. For example, if deliveries are always late, then the improvement should start at the logistics department. It would give a good impression if the manager from logistics department had a meeting with the customer and discussed about the delivery problems. Also sales person could go through customer candidate's dispute cases before selling. This would help to have an impression possible risks that might appear later or just to evaluate the payment term to be used for the order.

Continuous improvement should happen every day in Dispute Management and within all other internal processes, otherwise the competitor would get a head start and would be one step ahead. An impression can be taken from Harrington's wheel of fortune where idea is to follow the steps of the wheel and never stop. Harrington presents the wheel of fortune in his book called: *Business process improvement: the breakthrough strategy for total quality, productivity and competitiveness*. I believe that the employees should be very "sensible" all the time to feel and notice what new is happening and



brainstorming the ideas for the company. The ability to change fast is the key for the big market shares.

### 7.3. Validity and reliability of the study

The second interview and the questionnaire were performed to end-users only after two and half month after SAP Dispute Management was implemented. This was very early, because many of end users still didn't have much or at all experience from the new tool. This had an effect for the answers as well. The questionnaire should be repeated after one year for same respondents to see how answers have changed. After that there could be seen the final picture what was the benefit from Dispute Management.

The group of responders was only few, not many people answer to the questionnaire. It might be because they felt that they don't have enough experience to give proper answers. However, at least the answers came from people who actually have experience with the new tool and there are no guessing answers.

When comparing the amount of dispute cases last year 2011 and now 2012 when SAP Dispute Management is in use, there is of course much more dispute cases open now. The reason is that SAP Dispute Management opens dispute cases automatically if the invoice is over 21 days due or if there is collecting block. Also Dispute Management cannot be compared to previous Dispute Management tool, because there hasn't been one. Before it was handled only through emails and excels.

The research results reminded what is important and what should be done better in future. Especially results gave valuable information to which attributes it should be focused and to which not so much.

#### 7.4. Suggestion for future research

This research could be developed further by finding standard improvement ways for all reason codes. For example, if most dispute cases that are opened have the reason code *Liquidity*, then there would be an answer ready how to proceed in order to improve the situation. It should also be remembered to find solutions which are not jeopardizing other processes. This can be sometimes difficult in large company`s but for example process flow diagrams can be used to create the big picture.

Another development idea would be to study more Early Dispute Resolution methods. Purpose is to reduce the number of dispute cases by working hard before the dispute cases are born. It would be necessary to create training material for end-users to teach them what to learn from the dispute cases and how to prevent the increase of the dispute cases in their daily work.

Research could be done examining if and how domestic and foreign dispute cases differ from each other. If those differ, what are the reasons for that?

#### 7.5. How to proceed with SAP Dispute Management?

It is very important to keep the master data up to date. Related to SAP Dispute Management specially the customer master data should include the latest updates. DM also requires constant reporting. The reports are consisted with open dispute cases; most used reason codes, reduction in sales outstanding and customer satisfaction. Reports should be followed. All the case company`s business units should keep up the motivation towards the Dispute Management tool. This should be ensured by keeping training sessions and some other motivation techniques might be used as well. One technique would be to create a competition of which unit has the least dispute cases but I do not believe that this approach would be fair, because some units have more internal sales and dispute management is for the 3rd party sales only. Also it might lead to additional stress among end users.

Benchmarking for other companies, which clarifies how they are using Dispute Management, would be a good practice as well if there is a change. It would be good to study next SAP enhancement packages if SAP Ltd is offering new and useful features. Dispute Management tool should also be developed internally if there were some defects or something could be done better with SAP.

## 8. CONCLUSION

To be able to perform a business activity that actually is profitable, all sectors should be taken care well inside the company. Selling is of course one of the most important issues. Right after that comes good customer relationships. There is nothing more frustrating for the customer than to realize that company doesn't care about the problems that might come after product or service has been sold. Dispute Management as described in this research is relatively new way to handle disagreements with customer. It's process should be followed strictly to achieve best advantage of it. In a long run Dispute Management is one of the key elements when creating a sustainable customer relationship. Dispute Management is not only that company tries to get receivables as fast as possible; it is actually more taking care of the customer and its relationship.

The purpose of this research was to explore what benefit is received while implementing SAP Dispute Management tool and how the case company can learn its dispute cases to improve the whole order to cash chain to make it more customers friendly. The purpose was also to study if described Dispute Management handling procedure is providing right elements towards the case company's needs.

To achieve inclusive results this research introduces topics related to Dispute Management and gives an idea how disputes can be handled. The research theoretical framework introduces reader to the direction where Dispute Management belongs which is Customer Relationship Management and to Process Improvement methods. Dispute Management should be part of company's Customer Relationship Management and the reason codes descriptions from Dispute tool can be improved practicing suitable process improvement method.

Research process and interviews was aiming to receive different perspectives and ideas about Dispute Management implementation project. Research process started already July 2011, when first Dispute Managements project scope was introduced. The research plan was to interview three controllers from different business areas before and after

SAP Dispute Management implementation and create a BCFI questionnaire to have end users opinions in a larger view. Research gave valuable information from end user perspective and reminded how important it is to discuss always with end users when implementing something new to the organization. Research gave an impression that SAP Dispute Management tool is very welcome and it's positive effect has been noticed, specially its transparency and that it reduces double work. Most important issue for end users is that they can trust to information that SAP Dispute Management tool is providing. Most critical is that end user are not so willing to open dispute cases themselves and they still don't believe that new tool will helps with customer satisfaction.

End users are very busy in their daily work and dispute management is not something that everyone has to do daily in SAP. Learning how to use tool in SAP is still in beginning phase. When time pass by the end users will have confidence towards the SAP Dispute Management tool and hopefully some new improvement and new dispute case handling process ideas will arise. Tool should be as user-friendly as possible. It can be noticed that already now three different business units which have different business areas sees very different problems in Dispute Management tool. The challenge will be how to develop SAP Dispute Management as simply as possible and same time consider all end users requests without making others life more complicated. These three business areas have also very different reasons why dispute cases arise. When improving the business processes based on the root cause code it should be remembered which kind of business the unit is practicing, because not necessarily same improvement methods goes to all business areas.

The main goal in Dispute Management is that the whole organization, all employees would see dispute handling as an important mater for the company and would put an effort to it. Everyone can help customer to receive the best results of the order. There should be employees also who are taking care of the order to cash chain entity. One option would be to place dispute handling as a part of the quality control. This way it would be placed in company`s internal manual and it will be permanently taken as a way to work.

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## INTERVIEWS AND DISCUSSIONS

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Credit Manager, Interview 2.11.2011.

## APPENDIX 1: Survey questionnaire part 1. BCFI Expectations

	Attributes	Expectations (1-10) 1 = low 10 = high
	<b>Dispute management point of view</b>	
1	Time to handle dispute cases will be reduced after implementing SAP Dispute Management tool	
2	Real reasons behind dispute cases will be find out	
3	SAP Dispute Management tool will help in customer relationship management	
4	SAP Dispute Management will help in risk management	
5	SAP Dispute Management tool will help with unclear dispute cases	
6	SAP Dispute Management tool will reduce days outstanding	
7	SAP Dispute Management tool helps with customer satisfaction	
8	Cost saving will be accomplished	
9	I have great interest to use Dispute Management tool	
	<b>SAP Dispute Management tool</b>	
10	SAP Dispute Management support is easily available	
11	I have good acknowledgement of SAP Dispute Management tool	
12	I can trust SAP Dispute managements information	
13	Tool is enough inclusive (I find all necessary information)	
14	Tools processes and instructions are understandable	
15	Tool is useful for management reports	
16	Tool reduces "double work"	
17	Tool makes it fast to solve dispute cases	
18	Tool helps to harmonize dispute management process	
19	Business units open dispute cases themselves	

## APPENDIX 2: Survey questionnaire part 2. BCFI Experiences

	ATTRIBUTES	Scale 1= Low, 10 = High	Direction of development compared time before SAP Dispute Management:	Direction of development after one year:
	Dispute management point of view	Experiences (1-10)	Same, better or worse?	Same, better or worse?
1	Time to handle dispute cases will be reduced after implementing SAP Dispute Management tool			
2	Real reasons behind dispute cases will be find out			
3	SAP Dispute Management tool will help in customer relationship management			
4	SAP Dispute Management will help in risk management			
5	SAP Dispute Management tool will help with unclear dispute cases			
6	SAP Dispute Management tool will reduce days outstanding			
7	SAP Dispute Management tool helps with customer satisfaction			
8	Cost saving will be accomplished			
9	I have great interest to use Dispute Management tool			
	<b>SAP Dispute Management tool</b>			
10	SAP Dispute Management support is easily available			
11	I have good acknowledgement of SAP Dispute Management tool			
12	I can trust SAP Dispute managements information			
13	Tool is enough inclusive (I find all necessary information)			
14	Tools processes and instructions are understandable			
15	Tool is useful for management reports			
16	Tool reduces "double work"			
17	Tool makes it fast to solve dispute cases			
18	Tool helps to harmonize dispute management process			
19	Business units open dispute cases themselves			

APPENDIX 3: SAP Dispute Management process in Case Company X

