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The Cashless Society in Practice

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Abstract

This paper critically discusses the transformation of Sweden towards becoming a cashless society. It is based on an in-depth study of how the idea about a cashless society is translated and unfolded in practice, by a bank's actor network. The case study was done at one of the largest private banks in Sweden, that in 2011 started a transformation of becoming cashless. The "implementation" was finished during the fall of 2014 and the outcome of this study shows a new mobilized actor network where actors have become enrolled, however, some are still not convinced. The translation process among actors was influenced by different understandings as context, cultural meanings and interests, which affected their level of conviction. Thus, different understandings, new technology and practices, have challenged and opened up the black-box of banking that previously was taken for granted. This indicates that a bank as a macro actor has the ability to affect and transform its environment, building a network with actors around a cashless bank, even though everyone is not satisfied. This further indicates an actor-network still translating and negotiating, why the black-box of banking is still considered as open.

Keywords: Cashless Society, Banking, Change Management, Actor Network Theory, Translation

Introduction

"This bank is the customer's bank, they should help us! The bank should not gain money on us. This is bad. For me, this means poor service from the bank! A bank should handle cash."- Customer about a cashless bank

Currently, Sweden faces an important change and transformation process, moving towards a more cashless society, influenced and driven by new technology, changing both people's and organizations' behaviors. Sweden has made good progress in this transformation and is

considered as one of the world's most cashless countries (Arvidsson, 2014; Riksbanken, 2013; Segendorf and Jansson, 2012; Russell, 2014). But what happens when a bank, a social macro actor, removes one of the most central services connected to a bank - cash? The above comment from the customer exemplifies reactions of what Arvidsson (2014) refer to as "*turbulence within the Swedish payment system*".

Many of the new technological solutions within the banking sector have developed through rational incentives; the electronic payment card for instance, is connected to significantly lower costs than cash payments (Arvidsson, 2014; Segendorf and Jansson, 2012; Riksbanken, 2008). Further, cash-related crimes decrease within a more cashless society, which leads to increased security for the bank's staff and customers. In addition, environmental issues can decrease by minimizing handling of cash (Arvidsson, 2014). Further, four out of five purchases are today made electronically by card (The Local, 2014), and in average, Swedish inhabitants own one card per person (Riksbanken, 2013). The bank exemplified above, follows the macro level development towards a cashless society, by implementing the idea of a cashless bank.

As new ideas arrive, such as transforming towards a cashless bank, they affect actors of different networks and become translated among these actors (Latour, 2005). According to Riksbanken (2013), a new working payment market requires alliances and acceptance among actors. Further, it is argued by Bergman, Guibourg and Segendorf (2008) that the usefulness for a user of a product increases with the numbers of users of the same product, thereby network effects arise. The more merchants that accept cards, the more customers use their cards, and vice versa. Hence, the development towards a cashless society does lead to both plenty of new possibilities, but also to new kinds of problems (Linné, 2008).

Earlier studies (Arvidsson, 2014; Segendorf and Jansson, 2012) claim that new digital payment solutions, such as payment cards, Internet bank etcetera, is not generally accepted or used. Thus, even though the development of new technological solutions is mostly based on rational incentives, it causes turbulence and critique from people both directly and indirectly affected by the change (Arvidsson, 2014; Eriksson, 2014; Linné, 2008; Svenska Dagbladet, 2012; Gustavsson, 2013). Arvidsson (2014) argues that we do need to create a better understanding of costs and benefits of a cashless society and questions what this transition would mean to different actors. Even if there is a strong need to renew an economic system or organization, there are also people and actors within the system that may prevent initiatives towards change. It seems, banking, and its natural connection to money, is taken for granted and is deeply anchored in people's minds. Therefore, it affects people emotionally since money concerns everyone.

However, the actual and quite new phenomenon of a cashless society has been widely discussed (Arvidsson, 2014; Holmström and Stadler, 2001; Segendorf and Jansson, 2012; Linné, 2008; Humphrey et al., 2006). In addition to previous studies, this paper draw attention to the new phenomenon occurring in the Swedish society, by following the implementation of a cashless bank. Cash, which has been used for centuries, is now substituted by digital

solutions, which causes tensions within the Swedish payment system. This current debate is highly interesting and up-to-date since it covers how a macro actor, such as a bank, can change and create new behaviors. By focusing at something happening on a macro level at a bank, this study makes an important contribution to understand the actual phenomenon of a cashless society.

The bank and its natural connection to money can be thought of as a black-box (Latour, 2005), where the output is predetermined and deeply anchored in people's minds. However, the black-box of banking has now been opened up by the new phenomenon of a cashless society. Therefore, to better understand the change within the Swedish society, we simultaneously need to understand the opening of the black-box (Latour, 2005) of banking. Thereby, one can grasp how the idea about a cashless bank is translated among its actors (Czarniawska and Joerges, 1996). By drawing on actor network theory (Latour, 2005) we will use Callon's (1986) four moments of translation to follow how the idea of a cashless bank has unfold among actors within the network.

By conducting an in-depth case study of a bank, we aim to connect this ongoing process in the Swedish society with this theoretical framework, and to understand how an initial idea has travelled and finally been practiced within a network that contains a lot of tensions. The bank itself includes a network of actors affected by this change, which we aim to analyze in order to follow how an idea has been translated and understood. We therefore aim to answer: *How is the idea of a cashless society translated in practice?*

By studying this specific phenomenon, which has never been done before, this study contributes to earlier studies with new insights and knowledge of the bank's role within the digital development. Critically and constructively, this study illustrates what is currently ongoing in the Swedish society, combined with an understanding of the phenomenon on an organizational level, where it can be understood in practice. By increased knowledge within this area, one can better understand how changes can proceed and succeed and how people adapt to new practices. As the digital development has increased during the past years, there is no indication this will cease, which makes this a highly relevant topic to study and may be useful for organizational management.

As researching deeper into one bank, we are aware that we are analyzing one specific actor network among other networks. There might be another case within a different bank that has also become cashless. The same issue applies with actors interviewed. These actors are mainly affected by this certain bank's actions, while it could be another case and understanding among other actor networks that are not directly affected by this bank's actions. To achieve a better and deeper understanding, we chose to look at one bank instead of several.

The article consists of five parts. After the introduction, the theoretical framework used for this case study will be presented. The theoretical framework will be followed by the methodology that describes how the study has been conducted. After that, findings and

empirical result on how the idea of a cashless bank has travelled will be presented and also discussed. Finally, there will be concluding remarks and a discussion of the study's implications.

A Net of Actors

A change involves actors that become affected in a specific context. The framework of actor network theory, defined as ANT, primarily focus on tracing networks between actors, to build understanding for how these interact and how they are connected. While doing an ANT-study, it is not determined who is connected to whom and who affects and adapt to whom, but certainly all actors transform each other's worlds (Latour, 1986). The theory was early developed and influenced by the work of Bruno Latour, Michel Callon and John Law (Law and Hassard, 1999). Although the definition and understanding of the theoretical approach might be interpreted differently, the approach of Latour is hereby used as the framing of an actor network within the change of a bank being cashless. ANT will not be used as a theory of social norm, neither as to explain the society. It will rather be used as a framework to impose interpretation of a situation including different actors (Latour, 1999).

Relationships within actor networks are theorized by power relations of actors (Czarniawska and Hernes, 2005; Nicolini, 2009), which are structured through a process of translation (Callon and Law, 1982; Callon, 1986). Actors can take form as both non-human and human actors (Latour, 1986, 1987, 2005) and both are affecting and influencing the power relations within a network (Law, 1986). The actor can, according to Latour (2005), be divided between intermediaries and mediators who have different characteristics. Intermediaries are counted as stable and black-boxed, where the output is predetermined, whilst the mediators are less certain and are "...able to transform, translate and modify the meaning of elements they are supposed to carry" (Latour, 2005, p.39). Independent if an actor is human or non-human, intermediary or mediator, it has something in common. *It acts*, simultaneously as mediators transform and translate the world differently (Latour, 2005) the translation can take many forms.

Black-boxing, as mentioned above, is the process of affecting closure in a network, in other words described as; when a process is taken for granted. How the actors within the black-box, do transform or translate inputs into outputs, becomes unimportant unless the connections to the larger network is challenged in some way (Latour 2005; Kaghan and Bowker, 2001). Further, black-boxes are always the outcome of socio-technical negotiations but it takes a lot of effort in both creating them as well as to hold them in place. Even if a black-box can be considered as closed; closure of the black-box is neither complete nor final (Kaghan and Bowker, 2001). According to Latour (1987), it is the non-humans that eventually will decide whether the actor network is finally black-boxed as a technical or social achievement. ANT provides valuable methods for opening black-boxes and studying ongoing interaction in open networks (Kaghan and Bowker, 2001). With the help of the translation model, one can

understand black-boxes and thereby describe how ideas travel and come into place (Czarniawska and Joerges, 1996).

The Process of Translation

As actors interact, they also transform, interpret and change the world influencing the actions of other actors. By tracing the network of connections, it enables us to analyze how actions and ideas are transformed, but also translated between actors (Callon, 1986). As a new idea arrives at a place, this process of translation begins as the idea travels among different and multiple translators. These translators are the actors, which are defined as participants within an actor network (Latour, 2005).

According to Michel Callon (1986), there are four elements of translation before an actor network is defined; problematization, interessement, enrolment and mobilization, which can be used to analyze how power relations are structured between actors. The first, problematization, aims to identify the different actors and how they are affected by a certain question, in our case the question formulated within the research - *How is the idea of a cashless society translated in practice?* The second element is interessement, which aims to make the actors convinced by other actors that their interests are aligned. Enrolment, as the third moment is about making the actors enrolled through negotiations, trials of strength and tricks that make them attached to their interessement. If the interessement is successful, it achieves enrolment from the actors. The fourth and last element of translation is mobilization, which is to make sure the actors act according to the agreement and that they do not betray their interests. These interests and identities of the actors aim to be stabilized in relation to each other, although the interests and identities are still negotiated, as it is an actor network (Latour, 1986). Further, Callon (1986) developed the theory of actor network theory with the concept of an obligatory passage point, OPP. This OPP channels all interests that have been attributed to the actors, into one direction and all actors have to pass through this point. This makes the focal actor indispensable and the OPP forces the actors to converge on a certain topic. The obligatory passage point therefore becomes a necessary element to create a network (Callon, 1986) and will make the defined situation indispensable (Kjellberg, 2001).

Also Kjellberg (2001), who developed studies by Latour (1987) and Callon (1986), means that it is necessary to enrol actors so that they believe in the idea, accept it and disseminate it. It is necessary to control that the spread idea remains more or less the same over time. The difficulty is that the spread and success of an idea lies in the hands of others, and it is problematic to control others (Kjellberg, 2001; Latour, 1987). This is due to ongoing translations between and beyond formal organizations, since translation does not accept organizational borders, and are connected through so-called action nets (Czarniawska, 2004; Pipan and Czarniawska, 2010). As Latour (2005) argues about actor networks, Pipan and Czarniawska (2010) also claim that translations are ongoing and never final.

The Perception of New Ideas

In order to do research on innovation and change, much of the current management and organizational literature does adopt the concept of translation (Spyridonidis et al., 2014). Reay et al. (2013) mean that translation is a way to understand the spread of new practices. In line with new ideas, new practices develop and the ideas need to be translated in the specific context, influenced by actors with specific interests (Czarniawska and Sevón, 2005). Meyer (1996) also argues that an idea is often interpreted and translated based on personal characteristics and situational affections. Further, the author points out that some ideas are less likely to travel and to be translated. These ideas are rooted in cultural behavior, gender, ethnic or national culture, communal relationships as well as ideas based on religious understandings. On the other hand, the author also claims that those ideas that are most likely to travel are ideas that are linked to centrally rationalistic values. The tighter the idea is with the outcome, as a new technology increasing the efficiency for instance, the more likely the idea is to travel.

As an idea is continuously travelling, one must bare in mind that the idea-users might have different associations and they perceive the idea differently. This might also be the case for the idea-carriers who are often well familiar with the idea as such but might lack understanding of the context where the idea is supposed to take place (Sahlin-Andersson, 1996). Czarniawska and Joerge (1996) further argue for the master-idea, which is the main idea that will maintain the focus and build a bridge between the implementation and the acceptance of the idea. This master-idea becomes important in order to make an idea stabilized. If the idea is not successfully used, the authors claim there might be a de-coupling between the idea and the actions.

Settings and Methodology: Introducing the Case Company

The bank in this case study is one of the larger private banks in Sweden. The end customer can be of both private and business character. However, the bank is said to be the largest bank for private customers within Sweden. It was established in the early 19th century and has served as the “people’s bank” since then. In 2006, the bank changed from being a foundation to becoming a limited company. Today, the bank is established and well represented throughout Sweden.

One of the bank’s main focuses during the last years has been to develop their digital services for customers. They are adapting to new technology and aim to offer services integrated with professional and technological solutions. Services such as bank cards, the Internet bank, mobile application, bank-ID and Swish (a new digital payment service) are some of the services offered to all customers. As constantly developing towards a more technologically based society, people are also adapting to new technology by using the provided services.

Through following this development, in 2011, this bank became the first Swedish bank to announce a change to become a bank with no cash service in all of their offices.

The primary arguments for the change were to become more environmentally friendly, more cost saving and to minimize the risk connected to cash. Further arguments were to, as mentioned earlier, focus on developing more and better technical solutions as well as offering more developing tasks for the employees. The bank recognized a possibility of a competence shift, whereas they strategically decided to improve the service and educate employees into more professional tasks.

The information of the change was communicated internally and externally during 2011 and was to be implemented and completed in all Swedish offices by 2013. Today, there are only a few offices in Sweden left to implement the change. In the Western Region however, all offices are today cashless since November 2014.

Data Collection and Analytical Approach

A qualitative case study method (Czarniawska, 2014; Silverman 2013) was used to get an understanding of how this specific change took place in practice at the bank. However, we have chosen to call it “the bank” to ensure their anonymity. The fieldwork has extended over a period of five months, where we have conducted data and material in order to investigate the case of a bank becoming cashless. The aim of our study was to investigate how an idea in a bank, as a community actor, travels and translates by its actors. As we wanted to answer the question *how*, it is according to Silverman (2013) most appropriate to use a qualitative method as the main research method. In order to investigate how an idea is translated, the qualitative approach did help us to understand the social and cultural construction of the phenomenon (Silverman, 2013) of a cashless bank. This approach was also helpful since it enabled us to understand how reality can be constructed, which was of importance for us in order to understand and define the actor network.

The data collection started by doing interviews and collect physical material, such as brochures and flyers that concerned the change. Semi-structured interviews were held with open-ended questions, which made it possible to probe more deeply into the experiences of change (Dawson, 2003; Silverman, 2013), and this was also appropriate with the aim of answering a question of how (Silverman, 2013). Further, the interviews were held in Swedish since it was the respondents’ native language and therefore the most appropriate language to use. The interviews were further held with people directly involved in the change process such as top managers, middle managers, employees and customers, because, as Silverman (2013) explains, there may be multiple interpretations of the same situation or activity.

23 interviews were made (see table 1), spread out geographically in the area of Gothenburg due to different customer-bases and behaviors at the offices. The respondents had all been part of the change process at the bank, i.e. from its initial setup in 2011 to its finalization in 2014. Two top managers, five middle managers and five employees were interviewed within

the offices whereas eleven customers were interviewed at different places depending on the location that suited them the best. Students were for instance interviewed at their school. In addition, randomly selected customers were interviewed outside the bank offices. All interviews were recorded and transcribed and thereafter coded and theorized based on the answers we got from the open-ended questions (Silverman, 2006). The interviews differed in duration, from fifteen minutes up to two hours, depending on the respondent's role. The top managers and middle managers took about two hours to complete since they were more involved in the change from its initial setup until its finalizing steps. The interviews with the employees took about one hour whereas the customers only took about fifteen to thirty minutes to interview since they were only involved in the finalizing step of the change when it was first introduced to them. However, the duration of each interview was dependent on the respondents' willingness to talk since the questions were open-ended.

Position	# of interviews
Top Manager	2
Middle Manager	5
Employee	5
Customer	11
Total	23

Table 1: Positions and numbers of interviews

Data Analysis

To analyze our collected data we used grounded theory, which is preferable in order to analyze thematized field material (Glaser and Strauss, 2009). Based on this theory, we thematized and coded tensions that our interviewees had mentioned within the interview material, such as recordings and transcriptions. Several significant themes were found, that were particularly interesting due to our aim of studying the translation among actors within the bank's network. The most significant themes identified were the bank's arguments towards being a cashless bank, the bank's role in the society, how the practice at the bank changed, the perception of the idea about a cashless bank and how the change was communicated. Firstly, we started by identifying these themes. Secondly, we compared the themes depending on who the respondent was, in order to understand if there were differences in how people had perceived the change of a cashless bank. Finally, we identified the different actors by using actor network theory (Latour, 2005). Thereby, we could trace the network of the bank as well as identifying human and non-human actors. In accordance to ANT-theories, no actors were predetermined as more or less important. Instead, our fieldwork and questions to the respondents helped us understand actors with important roles as well as how they understood and perceived the change in practice.

To analyze the data of how the idea of a cashless bank was translated by its actors, we used the four elements of translation from Callon (1986) as analytical heuristics (Whittle and Spicer, 2008). This helped us organize the data and understand the process of translation as well as enabling us to compare the data received from our interviewees. Callon (1986) defines the moments of translation as; problematization, interessement, enrolment and mobilization.

Limitations

There are some limitations within our chosen method. Initially, due to the fact that the actual idea had already been “implemented”, there might have been information that the interviewees had forgotten since the time of the change. Therefore, it might have been to our disadvantage to use open-ended questions for all interviewees, since specific questions were not asked and therefore might have lacked some information that would have been useful for our analysis. Thereby, it would have been a more trustworthy and complete result to interview more people. On the other hand, due to the time limit, we considered it more interesting to do in-depth interviews since we aimed to receive deeper knowledge of the change.

As many of our chosen interviewees were often recommended by top- or middle managers within the bank, one must bear in mind that the interviewees did not speak to us independently. This makes us wonder if the results would have turned out differently if people already employed by the bank did not choose them. Further limitations could arguably be that employees and managers within the bank may not want to share all their thoughts and details about the change since they are representing the bank.

Findings: Opening the Black-Box of Banking

The bank has served as a social institution for more than 100 years. Even though digital services have developed, the cash service has remained stable until a couple years ago. Therefore, one can argue banking was earlier understood as black-boxed, where customers expected they could go and withdraw their money in cash, without questioning the service. Drawing on the understanding of Latour (2005), a bank offering cash was taken for granted. This has now become challenged when the bank decided to initiate a new idea of a cashless bank. Therefore, the perception of banking becomes questioned and so does the black-box of banking.

We will further on present our findings on how a bank with taken for granted services, could accomplish a change of becoming cashless and how this black-boxing makes sense for the translation of a new idea. Our findings show that the black-box of a bank offering cash was opened up due to new technology and the bank’s initiative to change. The new idea of a cashless bank was therefore in need of translation in order to close the black-box again.

Identifying the Moments of Translation

In order to see how the idea of a cashless bank has been translated, the actor network theory (Latour, 1986; Callon, 1986) helped us identify and trace actors with significant impact on the translation of the idea of a cashless bank. The already mentioned moments of translation; problematization, interessement, enrolment and mobilization, developed by Callon (1986) were used. This contributed to the understanding on how different actors gradually became involved in the complex process of translating the new idea and the attempt to develop a new network around the idea of a cashless society. Further, the theories helped us identify the degree of acceptance and involvement from actors affected by the change. In the following sections, we will identify and analyze each moment of translation connected to the theories presented in this report. This was done in order to study how the idea has been translated among the actors within the network of a cashless bank.

Problematization: The Incentives of Becoming a Cashless Bank

Problematization, which is the first moment of translation, includes the identification of the objectives and the actors of the project (Callon, 1986). Firstly, meeting top managers with leading positions at the bank made us understand the objectives and strategies from the bank's perspective and what the incentive was to become a cashless bank, from the management of the company. According to ANT theories (Callon, 1986) important actors, both humans and non-humans, within the network of a cashless bank were not predetermined but identified during the process of change. Secondly, middle managers and employees were affected by the change towards a cashless bank. The middle managers were the ones that communicated the change to the employees and sometimes even to the customers upon encounter. Employees were affected by the change in practice since they got significantly different working tasks after the implementation, as their former daily working routines partly were to help customers with cash issues. Thirdly, customers were also affected since they were not able to make cash related errands at the bank anymore. Finally, plenty of different actors in the society were affected and had an impact on the change. The Swedish Riksbank (Sweden's central bank), interest groups such as PRO (the national organization for seniors) and the finance association, other banks, media, corporations, Swish (a new digital payment service), security companies and IT companies, were actors identified as important for the development of the change. We will discuss how they were important later on. Thus, there is a big net of actors, both human and non-human (Latour, 1986), around a cashless bank that needs to be taken into account in the following analysis.

The bank's incentives were to "create a safer society" by minimizing the carrying of cash and that the customers can help in this process by being "cash smart", which they refer to as new and smarter ways of handling money digitally. Therefore, the bank decided to close the cash services in offices, which meant that customers could not make deposits or withdrawals of coins or bills. They argued handling of cash is expensive and also affects the environment negatively due to a lot of transportation. The bank also wanted to decrease the risk of robberies, which was a huge problem before the change. Therefore, they intended to take

greater responsibility and decided upon the initiative to become cashless and developed three main arguments for this: costs, security and environment. The top managers used a clear rhetorical approach by implementing these three arguments throughout the whole organization. This was also confirmed by the middle managers when talking about the incentives. One middle manager told us the arguments about costs, environment and security felt like a mantra in his head during the implementation period.

Instead of handling cash, the bank wanted to improve more complex financial services, such as private banking, insurances and pension matters; businesses that generates revenue. However, this led to cashiers not being needed to the same extent anymore, which led to employees switching to new working tasks.

“Our goal with this change was to transform the organization from being cash-intense to become more knowledge- and relations intense. If we remove the cash, we can focus on qualified tasks and in that sense, improve the knowledge about our customers and their demands... Jobs are replaced by digital solutions and we have to think differently... We need to embrace what is difficult. Easy tasks can be done in Baltics or India or by computers, and cash is a part of this. ATMs or machines can handle cash... By using our machines, we can save time and focus on qualified tasks instead.” - Top Manager

Thus, one can argue that the top managers framed the change in terms of a safer society, environment and decreased costs to create understanding and support from the affected actors. Efficiency and cost saving arguments could be considered as more complicated to communicate because this could easily be associated with deteriorations and to only be in the bank's interest. Therefore, we believe this was framed into something more positive and easy to argument for. Also, the top- and middle managers described the decreased usage of cash as a reason behind the change and that they saw a decreased demand for the cash service at the bank offices. They meant that the majority of the customers were not using cash anymore and were never asking about it. However, the employees did have another opinion about this. Before the change, employees said there were long waiting lines because of the great demand for cash services, and that there was a great need for staff in those offices. Accordingly, there was a great demand for cash in some sense. However, the bank was forcing its customers to use their cards instead of cash since no money can be paid out from the bank without a card. Therefore, we argue that this is the obligatory passage point for this project, as Callon (1986) describes it. The actors needed to converge to this new way of handling cash at the bank and therefore, this became a necessary element for the formation of the new network and the action plan in how people should act in the question of handling their money. One of the top managers described; as long as old alternatives are available, some people will continue to use it. He said that as soon as the old alternatives disappear, the customers will be forced to use the new alternative as they are left without choice. This was the reason for why the bank removed the cash from *all* offices. By doing so, they were able to force the customers into new habits.

Even though the change was driven by the bank and initiated by its top managers, the top managers meant that the society is changing and that the bank is a large actor that needs to take responsibility and act according to the societal change.

“The cash issue is not only a bank issue, it is an issue for the whole branch and society. We are not only a bank, we want to be a positive power rather than just an economic unit and we do have a responsibility to inform and transform.”- Top Manager

Also here, instead of expressing the change in the bank’s interest, they framed the change as the bank’s positive contribution to the society. However, since the customers did perceive the bank as a unit that should provide money, they probably did not think of the bank as a positive power in initiating such a change since they removed a frequently used service.

Building Intersement Devices Among Actors

The above-mentioned three main arguments; costs, safety and environment, presented by the bank, were used towards all different actors involved in the change process. The arguments were not only in the bank’s, but for all involved actors in the surrounding society. To start with safety, the bank argued it was not only the bank that was affected, but also individuals and shops whereas they wanted to make the society a safer place for everyone, by also decreasing criminal activities. According to their argument about safety, the bank got the union; the financial association, to support the choice to remove the cash service because of many incidents of robbery, which made the bank an unsafe workplace. This was an important stage in the ongoing process and the safety became rather an issue to solve in the interest for the employees.

Even though the cost argument can easily be related to the bank’s savings, the bank was eager to argue that this is cost saving for the whole society and that every actor gain from this initiative. However, there were different perspectives for different actors sake, of this cost savings arguments. Many of the top- and middle managers talked about the bank as a profit driven company that needs make profit. Also, they talked about the cash- intensive customers as only a cost and that cash is expensive for the whole society.

The third argument, environment, was also something that every actor would be able to relate to, but that the bank did impose to the project. No one would say they do not care about the environment, which makes this an effective argument to use for a cashless bank. However, the environment might not be the argument making customers wanting to remove the cash, but could be a positive effect of the change.

The bank was eager to point out that they were not *removing* cash, instead, they were *developing* digital services, and that was what the change should be associated with. They argued that new digital solutions could make old cash habits much easier, faster and simpler. The bank provides money also today, but not physically. The mission was to find new possibilities and they believed in smarter handling of money instead of cash. The top and

middle managers did not believe in reduced service but in helping the customers to become “bank smart”. One middle manager argued that in 99 of 100 cases, there are better solutions than handling cash in offices. However, the bank used the digitalization as an interestment device but they also talked about the development of these digital solutions during the process of change. This made us understand the digitalization within the bank also was driven by the change itself, because it was needed. This means the bank partly based the change according to the interestment device of digitalization, but their own technology was not fully developed by the time the idea about a cashless bank was initiated. Swish, for instance, was introduced in 2012 (Swish, 2015), a year after the change started. The technology of Swish did help the development of the idea (Meyer, 1996) and increased the efficiency in making the idea travel and getting people to understand.

Also, there were a discussion going on at the bank about new, more qualified working tasks considered as more developing and fun than working with cash. The top managers said that today, they are working with much more developing tasks than working with cash. Thereby, the bank was not talking about *decreasing* the workforce but instead *change* the cashiers’ way of working, because that would be better for them. Even though machines replaced jobs, this was nothing that the top managers were talking about.

From above reasoning, one can argue that the bank did build interestment devices so that different interests could be taken into account. The interestment devices identified were cost, environment and safety but also “new, better solutions” and “more qualified working tasks”. For example, instead of helping customers with cash issues, employees were educated in helping customers with issues about the Internet bank, Swish, bank-ID etcetera. These arguments were formed to work in line with different actors’ interests to stabilize the network and it also became a mantra for the bank in communicating about the change. Instead of focusing on the change itself, the bank did put focus on the positive outcomes and tried to hide some of the negative aspects that could arise. This lead to actors feeling they were working towards a better situation for him- or her. None of the employees however, indicated they were dissatisfied with their previous working tasks.

The Enrolment of Actors

Enrolment, the third moment of translation (Callon, 1986), enabled us tracing actors that have accepted the change or not and how this persuading took form. The following discussion helped us understand if the devices of interestment led to alliances and actual enrolment, in other words, if the interestment was successful. To easier follow, the actors were divided into different groups since all actors within the same group were considered similar and also acted alike. The four groups of actors are the social actors, managers (including top- and middle managers), employees and customers.

Enrolling Social Actors

One of the most important steps in making this translation successful was when the bank union; the financial association, accepted and supported the bank to be cashless because of the

many robberies that were occurring. When the bank union were enrolled, it was also much easier to persuade the middle managers and employees, because the change was communicated to their benefit. The bank's interestment device of security was successful in this case, especially because a cashless bank could also mean downsizing and efficiency, and this would not make the bank union support the change.

"The union was positive to the change, having the employees in mind. I have many colleagues that are hurt for life and now sick pensions because they are not capable to work at the bank after situations of robberies." - Employee and representative for the bank union

However, if the focus of the change had been on replacing people with machines instead of new qualified working tasks and safety, the bank union would probably not have supported the initiative as they now did.

Another big social actor that got enrolled in this change was the Swedish Riksbank. For example the Riksbank supports payments with card and mean that it is socioeconomically and cheapest to pay with card at amount that excess 20 SEK (Riksbanken, 2013). Therefore, the Riksbank was accepting the bank's interestment device about costs, which they also believed in. However, even though the Riksbank has supported the change during its process, their upcoming plans of launching new bills during fall 2015 will probably question their enrolment. This shows that the Riksbank may be enrolled in the project but they however think that there is a need for an investment in new bills. Also, the old bills need to be handled and exchanged into new bills, and a question that therefore occurs is who will be responsible for this exchange when the bank does not handle cash anymore. The respondents at the bank did not know how this problem would be solved. Recently, the finance committee of the Swedish parliament also announced that a new law might be actualized in the nearest future, proclaiming the banks need to handle cash. The new law is due to directives from the European Union, arguing all citizens of EU should have access to some banking services, including cash service (Gustafsson, 2015). Therefore, EU could not be considered as enrolled in the development of a cashless society.

Another important social actor to prevail upon was the different pensioner unions, which were more challenging than the bank union and also the Riksbank. To enrol the pensioners, the bank was visiting meetings and had information sessions to get the elderly people to understand why the change was important. Many of them did not understand the purpose and did resist the project.

"I am damned! Many people in my pension union are sad because of the bank's actions, without asking the customers. I did receive a letter with the information and I got so angry so I called them and yelled at them! Many elderly cannot handle new digital solutions and are therefore asking me a lot of questions, I feel bad for them. It is difficult for the elderly so I have to help them a lot." – Customer and representative for a pension union

During the translation process, some significant events occurred that were important for the progress of the change, especially those that were brought up by media. For example, there was a well-known owner of many restaurants in Gothenburg who made the important decision to only receive card payments in his restaurants. It was a lot of positive attention about this in media, which helped the change process at the bank in a positive direction. The more positive streams that supported a cashless society, the easier it was for the bank to argue for their decision about a cashless bank. The bank call these actors “ambassadors” that had huge implication for the project, and moreover, enrolment of more actors. Enrolling non-human actors such as new digital solutions were also something that helped the project in a positive direction. Swish, as a non-human actor, was an application that was not in place at the initial stage of the project, but was developed during the process and helped the argumentation and enrolment of actors. However, the bank could not argue for Swish from the beginning since it was not finished by the initiation of the idea.

On the contrary to positive attention, there were also medial negative publications that disturbed the change process in the other direction and made it more challenging to enrol actors. Björn Eriksson who is the former Head of National Police and today Chairman of the Security Industry in Sweden (Säkerhetsbranschen, 2015) has frequently debated about the development towards a cashless society. He has published a well cited paper where he claims cash is a legal right, and has appeared in both television and newspaper with his criticism. His critique primarily focuses on the digitalization as something that prevents integrity; by using the bankcard you are always watched (Eriksson, 2014).

Enrolling Managers

We have met managers at two different levels; both top managers where the incentives about a cashless bank where initiated, and also middle managers that each of them has the responsibility for offices around the Gothenburg area. These middle managers got the information from the top managers and had later on the responsibility to communicate this change to their employees at each office. The change process started by information sessions and weekly newsletters, where the ambition was to make middle managers understand the idea about a cashless bank, but also to make them feel confident about the change, so that they in turn could speak to employees. The top managers had great impact on how the middle managers did understand the change process, since it was their responsibility to launch the project. Therefore, the top managers had a significant role in how the change proceeded. A time schedule was introduced and the top managers were somehow responsible for the outcome of the project. Therefore, it was important for the top managers to make the middle managers convinced, so that the process would proceed as smooth as possible.

Also the middle managers were important in the process, since it was their responsibility to communicate to the employees about the change. Every middle manager had their own guide for how to implement a cashless office, and this guide had different steps that the office had to pass in order to continue with the implementation. Therefore, the offices did not implement the change at the same time due to circumstances as acceptance from employees and customers. The guidelines were handed out from the top managers to all middle managers.

Also, communication guidelines were handed out with clear instructions and arguments for middle managers and employees to use when speaking externally to customers about the bank becoming cashless.

When interviewing the middle managers, they all seemed convinced about the initiative and that it was the best solution for the bank, at least this was what they told us. They were all talking about the same arguments, had strong support for the project and focused on the possibilities and solutions rather than the problems that could arise. The three arguments; cost, environment and safety were brought up by every top- and middle manager. Further, they also talked a lot about the fact that the bank has become the first one certified for its environmental actions, which also goes in line with the ambition to become a cashless bank. The managers, at all levels became enrolled in the project and thought a cashless bank was the best alternative. Also, even though the three arguments about costs, environment and safety came from the top managers, it sounded like the middle managers' own words when talking about it since they were convinced and enrolled about the idea of a cashless bank. As the instructions about the change came from the top management, it would probably not have been a choice to disagree, why the middle managers more or less became forced into the project. Their enrolment could be seen as expected from the management, and since the middle managers are responsible for the outcome of the change at each office, they had no choice to not agree.

Enrolling Employees

When the middle managers were informed about the project, it was their turn inform their employees. Some of the middle managers were convinced from the beginning while some of them had to convince their employees before they were even convinced themselves. Meetings were held and newsletters concerning the change were sent out weekly. However, the argument about security was what most of the employees could relate to and felt as the most important since they were exposed for the risk in their daily work.

“The bank definitely wants to become cashless because of the security risk. I have experience from bank robbery myself, so I thought that was a very good reason to do this change. I remember I felt very exposed when handling cash at the office.” – Employee

Even though all of the employees talked about the three arguments presented by the bank, some of them were not convinced of how to use this argumentation and the reasons behind the change. This also affected their communication to customers.

“First of all, I believe the bank wants to make money in this, but they use other arguments. When I have customers almost crying because they cannot withdraw their money, I cannot talk about the arguments of environment, costs and safety, that is ridiculous because they do not care about that.” – Employee

Moreover, employees said they seldom talked about the three arguments with customers since the customers would not understand. Our understanding is that top managers and middle

managers easier talked about these three arguments than the employees. The arguments about costs could be interpreted differently. In one way, the cost saving was about transportations, handling of costs and efficiency but also about non-humans such as machines taking over human work duties. Some employees explained they were anxious about the cost-savings and thereby worried about their jobs. The fact was that cashiers were not needed anymore and their work duties were shifted towards different kind of customer services. The employees explained a feeling of threat, that work duties were removed. Since many employees were afraid of losing their jobs, they said there were a lot of anxiety and denial. The interestment device of more qualified working tasks, was also something that affected the daily work for the employees and their perception of the change, in a both positive and negative way. One can wonder if this interestment device where something that got the employees enrolled or rather afraid what was going to happen to their job. Thus, if the management were not arguing about possibilities with this new kind of working tasks, the employees would probably be even more anxious.

Analyzing the enrolment of employees made us understand that all of them were not totally convinced about the change project. Even though most of them understood the background of the change, many thought the arguments were a bit fake and not what the underlying reason actually was. However, even though all of the employees were not convinced, they did not have a chance to resist as long as they wanted to keep their job at the bank. Therefore, all of the employees got enrolled even though they might not have been convinced about it. One can argue they were forced to be enrolled.

Enrolling Customers

The customers were informed about the project by letters and phone-calls as well as they received messages through their Internet bank. All offices had flyers and posters about the change, so that customers visiting the banks could see it. However, the customers were treated differently. The top managers described that it was impossible to get in touch with every customer and therefore they segmented their customers. The most profitable ones were informed by a phone-call about the change, a letter informed others and some were informed when visiting the bank. Except printed material, the ambition was also to talk to as many customers as possible to make them understand the change. The employees were told to inform every customer about the change and new solutions. Although the staffs were told to inform customers, some of them said they did not feel the change affected them, and therefore, they did not talk to the customers about it. Also, employees said it was easier to refer someone to another office that still offered cash service, instead of talking about the fact that they could not offer cash anymore. Because, many customers got irritated, sad, angry and upset when they were not able to solve their cash issues at the bank. If the solution were available at an office close by, the customers did not get as irritated. Some employees did not want to bring up the topic if the customer did not ask, even if they were supposed to. They did not always bother to have the discussion. Many employees felt uncomfortable talking to customers about the bank removing cash.

“I feel bad because the customers think that I have made this decision. The bank was only doing this change because of its own winning. They are trying to convince themselves that it is for the customers, but it is only for the rich customers.” – Employee

As the bank formerly was a foundation, some customers did not understand why the bank aims to be profitable. They still think the bank is an institution that should help all kind of customers and that cash is a service that should be included in banking.

“This bank is the customer’s bank, they should help us! The bank should not gain money on us. This is bad. For me, this means poor service from the bank. A bank should handle cash!”
– Customer

Thus, there were a lot of negative discussions during the change process. One middle manager said he was lucky not working at any office when they were removing the cash. He thought the closing moment was the worst time period ever. Because of many negative reactions, the last office to close the cash service had to be postponed to almost a year later, since there were still long queues and a huge demand for cash. The day before the closing, they felt that customers were not ready for the change and they therefore made the decision to postpone it. However, the fact that many customers were upset about the change was something that the bank had determined and therefore they were also aware of the fact that some of them would leave the bank. The middle managers said that the loss of customers were a calculated risk as they cannot please everyone. All customers are not able to take care of an own bankcard, Internet bank or other digital solutions, because of for example disabilities. Among the respondents, there were discussions about the responsibility for these customers that are left out of the system.

“There is some customers that is left behind, but that is the responsibility of the society rather than the bank. There are people that are outside the system, no fixed address, substance abuse problems, disease situations etcetera. The bank usually have to take care of these people but it is not our responsibility.” – Middle Manager

Accordingly, by not helping these customers with cash issues and since they are not able to use the digital solutions, the bank “get rid” of these customers. However, many customers thought a bank needs to find solutions suiting everyone in the society, since everyone is in need of a bank.

There were also customers completely fine considering a bank without cash, but as discussed above, the majority thought it was a bad solution. When talking to the top managers, middle managers and employees, all of them had the bank’s main arguments in mind when they described the change, but this was nothing the customers referred to. The cost was sometimes mentioned in terms of the bank’s winning, and not for the society, which was what the bank wanted to communicate.

The digital safety was also an issue that the bank needed to handle. Since criminal activities are today more common on the Internet, people were worried about this, which also disturbed the development of the idea of a cashless bank. The bank argued for a safer environment of the bank offices but people also seemed worried about the digital safety. Therefore, some people did not want to keep their money digitally and the idea was less likely to become accepted. It became an issue for the bank to prove that customers' money are safer in the cyberspace than in peoples' pockets. However, even though customers were not convinced, they had to be enrolled in the new system, since no other option was now available; they cannot withdraw or insert cash at the bank offices anymore. Also, one can understand that the bank chooses to convince some customers, and some not. The people referred to as "left behind" seemed to not be as important to convince as other profitable customers.

To conclude Callon's (1986) moment of enrolment; cost and security seem to be successful intersement devices among concerned actors, but it is hard to connect the argument about environment as an intersement device that made actors enrolled. Even though the environment probably is important for all actors, none has accepted or been enrolled because of this argument, which means this intersement has not lead to alliances, or actual enrolment. As discussed above, some actors were more convinced than others, which might both be a conscious and unconscious choice from the bank. Top managers and middle managers were all convinced about the project and were confident to communicate and go through the change. The employees were most of them convinced, but there were also some skepticism and questioning about the initiative. When it comes to customers, there were many that still were not convinced. The understanding is therefore that actors got less convinced, the longer distance they had to the management of the bank. However, independent of conviction, all actors had to be enrolled since a cashless bank was the only option for all of them.

Mobilizing the Network

As previously discussed, not all identified actors were convinced, but enrolled, and the question is if all of them were mobilized into the new practices at the bank? Callon (1986) call this mobilization, when enrolment becomes active support. Many customers were identified as negative about the project, but they are however still customers of the bank since almost all banks have followed the development of becoming cashless. Also the employees, that had negative thoughts about the change, are still employed within the bank. In some way, the employees have found it okay working with new working tasks instead of looking for a new job. Customers are doing their bank affairs digitally instead of going to the bank using the cash service, since that is no longer available. One can therefore argue that mobilization was accomplished at the bank, but without everyone convinced.

The bank and the top managers, which Callon (1986) would call the initiating actors, ensured that the allied spokesmen such as the middle managers and employees acted according to the agreement and refrain from betraying their interests. They communicated what the bank initially wanted to change and the outcome became successful since everyone is today having

a bankcard and cannot go to the bank and withdraw money anymore. They have therefore passed the obligatory passage point since everyone is in need of a payment card. However, the interessement devices used to enrol different actors did not become as important for mobilization, since everyone had to be mobilized anyway. Therefore, the interessement devices became inefficient as Callon (1986) describes it. On the contrary, without support from the bank union throughout the process, the project might not have progressed in the same direction why the interessement device *security* became important for both enrolment and mobilization.

Closing the Black-Box of Banking?

As recently discussed, the project became mobilized and one can question if this has the same implication as if the new practices have become black-boxed and taken for granted as Latour (1986) would describe it. We would argue that this is not the case. The idea about a cashless bank was translated differently by the different actors and led to that not everyone got convinced to the same extent; people are still questioning a bank without cash. As Czarniawska and Joerge (1996) discuss, the master-idea about a cashless bank did not become generally accepted because the customers were not convinced about the outcome and some employees still have concerns about whether the change was the only right thing to do. Therefore, it becomes a de-coupling between the idea and the actions, even though they act according to the initial idea. Because of the employees' distrust to the new idea and that they did not believe in it, could be a reason to why they not successfully convinced the customers.

This means that, since the customers and some employees were not convinced, the idea about a cashless bank cannot be understood as black-boxed. Because, even though new practices are mobilized and put into place, they are still contested. As Latour (1986) argues, an actor network is never stable since negotiations are always ongoing. This could be applied to the fact that some actors still question the idea of a cashless bank, as well as other important actors will continue to affect the network with its actions. For instance, the fact that the Riksbank will launch new bills during 2015 will question the network and probably transform it into something else. Also, the new law proposed by the European Union about banks' responsibility to offer cash, does also support our predictions; the closure of the black-box of a cashless bank is neither complete nor final as Kaghan and Bowker (2001) describe it.

The former black-box of banking could be one possible reason to why some actors are not yet convinced and that the change process has not yet been accepted. Because of deeply rooted understandings of that a bank should offer cash, it becomes a challenge to close this opened up black-box again. When listening to customers, their perception about a bank is that they expect a bank to offer cash. The fact that, as mentioned above, it takes time to make something black-boxed, one can imagine it also takes time to change something that is already taken for granted. According to Latour (1986), non-humans are important in making actor networks finally black-boxed and we would argue that technical solutions such as bankcard, Swish, Internet bank etcetera were significantly important in the process of enrolling and convincing actors. Actors that were familiar and already users of these digital

tools were easier to convince. However, making more and more people convinced about the technical solutions could make the network more stabilized and black-boxed. If all actors understand the new solutions as better than cash, the system will probably not be questioned anymore.

Discussion: Understanding the Cashless Society in Practice

A network of relationships around the new practices at the bank has been successfully established, as Callon (1986) call it. The actors have through interaction, translated each other's worlds to become networks around the idea of a cashless bank (Latour, 1999). The bank's initial objective was a bank without cash and since that has become reality, the translation can be considered as successful. Power relations have been created as the idea has been translated among actors (Czarniawska and Hernes, 2005; Nicolini, 2009). The actors have had different shapes of human and non-humans (Latour, 2005) where all of them have contributed to build the new actor network. As the bank succeeded to align actors such as the unions, the top- and middle managers, employees and also non-human (Latour, 2005) such as Swish, the payment card etcetera, they managed the change despite some of the actors were still not convinced. Employees for instance, were not convinced through the interesement devices proposed by the bank. Further, the actors have had different roles in translating the idea depending on whether they are intermediaries or mediators (Latour, 2005). Since mediators are less certain than intermediaries, they have contributed to the translation of the idea in their own way, which also means no network look alike. Neither can a network be stable since these mediators, such as managers, employees and customers, constantly act and translate. Intermediaries on the other hand, are stable and predetermined, which in this case could be exemplified through non-human actors such as Swish and the payment card. Even though these intermediaries do not translate themselves, *they act* (Latour, 2005) and therefore the world around them is translated depending on their presence. Hence, they have been significant for how the idea about a cashless bank has been translated.

What becomes important concerning the idea about a cashless bank, is the fact that even though ideas travel among actors who shape each other's worlds in different networks, the main idea is also shaped by its context (Czarniawska and Sevon, 2005) and situational affections (Meyer, 1996). This could be applied to the case of the bank in order to understand why the idea was not actualized at the same time in all offices. Some offices were not considered as set up for the new practice. These different situations have all affected the translation of the idea, since each office consists of actor networks that in turn translate the idea shaped by its specific context.

As the idea has been translated and established into the actor network of the cashless bank, it has enrolled (Callon, 1986) actors, but as shown in findings, the actors have had different levels of conviction. One possible explanation to the different levels could be Meyer's (1996) argumentation that an idea is translated and understood based on personal characteristics, interest and experiences. Also gender, ethics and culture can affect the way someone

perceives a new idea. As understood, there are different interpretations among the human actors, which affect their translation of the idea. As they act as mediators (Latour, 2005), they influence the network based on Meyer's (1996) proposed characteristics. A young employee for instance, who is used to today's technology, might consider the new idea as less problematic than an older employee or customer that still uses cash, as the representative for the pension union explained. The new technology and the fact that people adapt to changes differently, might also explain why some people question a cashless bank. Meyer (1996) further claims that actors more likely adapt to ideas that are linked to rationalistic values, which would also explain why those who have experienced robbery more easily adapt to the interestment of security. This though, does not seem to apply in this case for all actors, especially not those who were not convinced. Probably due to the fact that the idea about banking is deeply anchored into people's minds and therefore taken for granted as black-boxed (Latour, 2005; Kaghan and Bowker, 2001). The understanding of the idea, applies better to what Meyer (1996) argues about why some ideas are less likely to travel. He claims that if they are rooted in cultural behavior and national culture, they are less likely to travel among actors. This could explain why it becomes complex to close the black-box of banking, as this is something people have been used to for hundreds of years. Further, the cash and its function has remained stable and not developed as much as other services within the bank, such as digital and technical solutions. Accordingly, cash itself has cultural meanings as it has been used as currency for centuries and way before the payment card were introduced. Therefore, as an historical currency, the cash and the idea of banking is deeply rooted in cultural meanings, as also presented in findings. These cultural meanings probably contribute to the fact that the black-box is still open and not closed in this case. It will become a challenge for the development of a cashless society overall to handle, as long as people, or mediators (Latour, 2005), question the idea of banking as shown in our case of a cashless bank.

The interestment devices (Callon, 1986) proposed by the bank's management, were as presented in findings; cost, security, environment, new developing working tasks and also new digital solutions. One could argue that each of these, could be rational reasons to develop a cashless bank. As presented in the theory by Meyer (1996), ideas based on rationalistic values are more likely to travel; the same applies to ideas that are well connected to the outcome, such as new technology. Based on the fact that these assumptions would be the case, the natural outcome for the idea would be that actors were more easily enrolled without questioning. Obviously, this has not been the case when looking at how the idea was translated among the actor network. The reason why actors do not become completely convinced might be due to the fact that the bank uses these interestment devices to frame their own incentives to become cashless. Because, is it really about improving service quality or is it about machines replacing people? Top managers, as idea-carriers (Sahlin-Andersson, 1996), refer to the incentives, as more cost efficient related to the aim of positioning the bank, thus, not the same as the used interestment devices. Therefore, this could be one reason to why it has become challenging to convince the idea-users (Sahlin-Andersson, 1996), such as human actors who do not share the same incentives. The author proclaims the idea-carriers as more familiar with the idea, why a cashless bank also becomes translated differently when it

travels among different contexts. The incentive of a cashless bank as cost efficient, does not apply to all actors, why the actor network is constantly negotiating (Latour, 2005).

As mentioned earlier, several factors have had impact on the conviction of actors, such as different personal characteristics, interests, experiences, cultural behavior etcetera. What becomes interesting when following how the idea has travelled and been translated among actors, is that ideas linked to rationalistic values have had significantly lower impact on human actors than cultural meanings. Based on this information, it becomes interesting to consider how Sweden as a cashless country is perceived and translated internationally. As cultural meanings about banking affect the idea about a cashless society, the translation of Sweden as a cashless country among international actors, will probably be a challenge. Thus, even though Sweden is one of the most cashless countries, tensions were identified nationally regarding the perception banking, when the bank's cash service was removed. Therefore, when Sweden is integrating internationally, one can expect even more tensions among countries where cash is still used to a large extent. Regarding tourism for instance, the cash issue could be an obstacle for tourists unaware of Sweden as an almost cashless country. Also, the international business could be affected if the systems do not work efficiently aligned. This, because other countries have not come as far as Sweden in this development.

Consequently, one can understand that the idea of a cashless society is also shaped by the context of Sweden, nationally and internationally. As our case shows, the enrolment of important actors was needed in order to make the translation of the idea successful. Therefore, enrolment of international actors, such as countries and organizations etcetera, becomes important for international cooperation. Since Sweden is part of the European Union, the country has to agree upon directives and as discussed earlier, EU is now proclaiming directives regulating the cash service at banks. As actors shape the context of a bank, the same applies to Sweden, why this initiative from EU will in somehow affect the role of Sweden as a cashless country within the broader international context.

Riksbanken (2013) stated that the development towards a new payment system in Sweden requires alliance among the actors affected by the change, in order to make a new system accepted. Kjellberg (2001) also claim that actors must be enrolled so that they believe in the idea, accept it and disseminate it. The fact that human actors do not have a choice to use cash service anymore, make them enrolled and mobilized (Callon, 1986) in the established network of a cashless bank. After all, the bank has still succeeded by mobilizing actors (Callon, 1986) and is today considered as a cashless bank. By the initial strategy of becoming cashless, the bank managed to force their actors within their network to adapt to the new idea. One can argue that the bank has controlled its customers to follow the idea, which Kjellberg (2001) claims is important to make the outcome similar to the initiated idea. Moreover, Latour (1987) and Kjellberg (2001) mean that it is difficult to control the spread and success of an idea since that is depending on others. In this case, the actors did not have a choice to resist the idea of a cashless bank and it was therefore easier for the bank to control the outcome of the change. Through the obligatory passage point (Callon, 1986) of using payment cards to withdraw cash, the bank has created new behaviors among the human- and non-human actors. The fact

that a bank can force its customers into an intended direction is basically due to the dependence from customers, as they do not have much choice to switch bank, since almost every bank in Sweden is now cashless. This leads to another problem that Björn Eriksson (2014) highlights. He claims that, moving towards digital payment methods enables both banks and other institutions to track customers' payment habits. Integrity problems arise, since customers are today forced to use the digital services and cannot pay anonymous with cash. The bank takes the responsibility to reduce criminal activities connected to cash, but that leads to these integrity problems. One can question the bank's responsibility in this and if the bank is the right actor to decide upon their customers' behavior. Consequently, it further becomes a question about the perception of a bank. What role does the bank have in our society?

Since the network of a cashless bank is mobilized as the last moment of translation (Callon, 1986) the outcome can be considered as successful. Therefore, one can argue that the bank as an actor within this network has become a powerful influencer. Although not by itself, but supported by other actors in the network, such as the union, Swish, payment cards, managers, employees and also customers, who all together create a powerful network by translating the idea of a cashless bank. However, even though this new created network has been successfully established, the banking actor network may not be as powerful as it was before the black-box was opened up. Today, people are questioning the black-box of banking that before was taken for granted. Thus, this could probably mean the bank has lost some of its power by opening up the black-box of banking and now having struggles in closing it again. This could further explain the *turbulence within the Swedish payment system* as Arvidsson (2014) refers to. However, the network can at any time be contested and the translation can become questioned again. For instance, the fact that the Riksbank is going to print new bills during the fall of 2015 might disrupt the mobilized network if the bank has to handle cash and exchange bills. As Latour (2005) argues, an actor network is constantly negotiated as interests and identities within the network are always under transformation. This is also the case for this actor network and the idea about a cashless bank.

Concluding Remarks and Implications

The aim with this paper was to understand how an idea about a cashless society was translated in practice. This was done by a case study of a Swedish bank transforming to become cashless. We were able to answer this aim by tracing the network and actions based on Latour's (1986) actor network theory as well as Callon's (1986) four moments of translation. By using these theories, it enabled an understanding of how actors act and translate ideas, shaped and affected by their actor network.

Our study shows the actor network of a cashless bank that has become mobilized with actors enrolled even though not all of them were convinced. By framing the bank's incentives into intersement devices of cost, security and environment, the bank were able to declare the change of becoming cashless. The bank has succeeded in developing a new practice of a

cashless bank, and the network has developed to something powerful where different actors affect each other and make each other important for the network. Without some actors enrolled and supporting the change, the outcome would not have been as successful, maybe not even possible. For instance, digital solutions as substitute for cash became important. Also, the conviction of the union through the interestment device of security became significant for the bank to proceed with the change. Thereafter, other actors could be enrolled without being convinced since they did not have the same possibilities to influence the network. For these actors, enrolment could be successful without strong interestment devices. Thus, many actors such as employees and customers had no other option than being part of the new network and practices.

By considering banking as a black-box that has been opened up due to the new idea of banking, this can partly explain the turbulence within the Swedish society. Since actors within the network of the bank are translating and questioning the idea, the black-box is still open. Our study highlights the bank's role and how its function has become questioned. It is highly interesting how something deeply rooted, as the perception of banking, can suddenly be contested. Further, cultural meaning had large impact of the understanding of a cashless society. It was shown that these cultural meanings had significantly larger impact of the translation than ideas linked to rationalistic values as presented by Meyer (1996). This further contributes to the fact that the black-box is still open. Already, movements that contest the idea of a cashless bank within our society can be identified. For instance, the launching of new bills and the proposed directives from the European Union of the bank's responsibility to provide cash. In the nearest future, we will probably face new movements that will either boost or disrupt the actor network of a cashless bank.

By looking at the case of the bank, we can understand that cultural meanings could also have impact on Sweden's international relations, whereas the idea of a cashless society could be even more difficult to translate internationally. If other international actors are not enrolled by the idea of a cashless society, Sweden's international cooperations could be negatively affected. However, as our case showed, positive network effects can arise the more actors supporting the idea and this could be the case also if Sweden inspires international actors to follow the same development.

Above insights can be useful for managing organizational change processes and to understand how ideas on macro level are translated in practice. By looking deeper into one specific case at a bank, this study contributes to the knowledge about the phenomenon of a cashless society overall. This will create a greater understanding and therefore also diminish the turbulence within the Swedish payment system. By drawing on the insights from this bank's successful enrolment of actors, organizations can gain both advantage and understanding from the bank's actions. The study also contributes by stating the importance of how a context and its actors can affect an idea, why this change cannot be expected to turn out similar in other contexts, translated by other actors. Therefore, each case needs to be considered and treated uniquely, which management needs to be aware of. However, due to the technological

development, other countries that sooner or later will follow the same development can gain insights from this case, interpreted and translated by their specific context.

A limitation of the study was that we were only able to meet managers and employees still employed at the bank, which might exclude thoughts and perceptions about the idea of a cashless bank from previous employees. Due to our time limit, we were only able to study this change in retrospect and the respondent's thoughts about the change may have changed during the process. Therefore, it would have been interesting to study a similar change from its initial setup until its finalizing and aftermath. Further, the study was limited to one bank in one specific region, which means we cannot assume the same case would apply within banks in general. Other implementation methods might have been used at other banks, which would also affect the outcome differently.

For future studies, it would be interesting to study how this mobilized actor network will develop and whether the idea of banking will become black-boxed again as it once was. Also, from an international point of view, it would be interesting to study how Sweden's international relations will be affected by the Swedish development towards a cashless society. To understand this societal development, our case study is concentrated on banking but since this development also affect other services in the society, it would be interesting to also study one of these in practice.

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