

The critical factors in the harmonization of the mandatory payroll reporting

Laskentatoimi
Maisterin tutkinnon tutkielma
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2013

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Title of thesis	The critical factors in the harmonization of the mandatory payroll reporting				
Degree	Master of economics				
Degree programme	Accounting				
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Year of approval	2013	Number of pages	38	Language	English

Abstract

PURPOSE OF THE STUDY

This paper studied which factors need to be emphasized in the beginning of an innovation project. The paper focused on an innovation project which aims to standardize the mandatory payroll reporting in the Finnish context. The aim of the paper was to identify the factors which the focal actor has to lay special emphasis on when one attempts to build stronger link between oneself and the other actors inside the actor-network. The result of this paper may act as a guide for projects with similar standardization targets.

DATA

The data for the paper was gathered through semi-structured interviews. The total of twelve interviews were conducted, in which fourteen participants of the innovation project were interviewed. The participants represented different stakeholder organizations of the innovation project. The participants came from four different groups; payroll data receivers, payroll data senders, ministries and software houses. After the interviews the data was analyzed with the help of a qualitative data analysis tool in order to indicate the factors which were emphasized by the interviewees.

RESULTS

The paper indicated that the focal actor has to lay special emphasis on six factors. The factors highlighted in this paper were 1) execution, 2) communication, 3) win-win-win vision, 4) scope definition, 5) commitment and 6) political power. The paper offers insight into the actions of the actor-network and introduces factors that need to be emphasized when the focal actant attempts to produce a viable actor-network. In addition, the paper indicated that the actor-network theory emphasized these factors as well. Thus the paper contributes to current actor-network theory-based accounting literature by identifying factors which help the actor-network to be successful and by indicating that these factors are identified by actor-network theory as well. In addition, this paper offers guidelines for project management of projects with similar standardization targets

Keywords actor-network theory, actor-network, actant, critical success factors, payroll reporting

Tekijä Mika Borg		
Työn nimi Kriittiset tekijät palkkaraportoinnin harmonisoinnissa		
Tutkinto Kauppateiden maisterin tutkinto		
Koulutusohjelma Laskentatoimi		
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Hyväksymisvuosi 2013	Sivumäärä 38	Kieli Englanti

Tiivistelmä

TUTKIELMAN TAVOITTEET

Tämä tutkielma tutki millaisia tekijöitä tulisi painottaa innovaatio projektin alkuvaiheessa. Tutkielmassa tutkittiin projektia, jonka tavoitteena on standardoida palkkaraportointia Suomessa. Tutkielman tavoitteena on tunnistaa millaisia tekijöitä alkuperäisen toimijan tulee painottaa, kun hän pyrkii luomaan vahvemman yhteyden hänen ja muiden toimijoiden välille toimijaverkossa. Tutkielman tulokset voivat toimia ohjeena projekteille, joilla on samankaltaiset standardointitavoitteet.

LÄHDEAINEISTO

Tutkielman aineisto on kerätty teemahaastattelulla. Teemahaastatteluita tehtiin kaksitoista, joissa neljätoista innovaatioprojektin osallistujaa haastateltiin. Projektin osallistajat edustivat projektin eri sidosryhmäorganisaatioita. Osallistajat koostuivat neljästä eri ryhmästä; palkkaraportointitiedon vastaanottajista, palkkaraportointitiedon lähettäjistä, ministeriöistä ja ohjelmistotaloista. Haastatteluiden jälkeen kerätty aineisto analysoitiin kvalitatiivisen data-analyysiohjelman avulla, jotta haastateltujen korostamat kriittiset tekijät kyettiin osoittamaan.

TULOKSET

Tutkielma osoitti että alkuperäisen toimijan tulee painottaa kuutta tekijää. Nämä kuusi tekijää olivat; 1) toimeenpano, 2) kommunikaatio, 3) win-win-win visio, 4) laajuuden määrittäminen, 5) sitoutuminen ja 6) poliittinen valta. Tutkielma tarjoaa tietoa toimijaverkon toiminnasta ja esittelee tekijät, joita alkuperäisen toimijan tulee painottaa, kun hän pyrkii luomaan toimivaa toimijaverkkoa. Lisäksi tutkielma osoitti, että myös toimijaverkkoteoria painottaa näitä tekijöitä. Näin tutkielma luo kontribuutiota toimijaverkkoteoriaan perustuvaan laskentatoimen kirjallisuuteen tunnistamalla tekijöitä, jotka edesauttavat toimijaverkon menestystä ja osoittamalla että nämä tekijät on tunnistettu myös toimijaverkkoteoriassa. Lisäksi tämä tutkielma tarjoaa ohjenuoran projektin johdolle projekteissa, joilla on samankaltaiset standardointitavoitteet.

Avainsanat toimijaverkkoteoria, toimijaverkko, toimija, kriittiset menestystekijät, palkkaraportointi

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1. Introduction

As the information technology (IT) continuously shapes our daily environment, it is evident that a continuous change is taking place in the business environment as well. In recent years, there has been a growing interest in the digitalization of accounting (e.g. Penttinen and Hyytiäinen 2008; Granlund 2011). The importance of the subject is acknowledged in the European Council as well when the Council has set the objective of 25 percent reduction in the administrative burden which arises from EU legislation (European commission 2009). The Finnish Council of State has approved the objective as well and they have created an action plan in order to achieve the target reduction (Ministry of Employment and the Economy 2009). In the action plan, the mandatory business reporting was identified as the key element which generates the majority of the administrative burden for the Finnish enterprises.

There is a large number of evidence to support the belief that the digitalization of the accounting will help enterprises in various business sections (e.g. Memis 2011; Anderson and Lanen 2002; Sutton 2000). The digitalization of accounting will result in better efficiency when several functions are transformed into more automated format. In general, this means that the work which was earlier done on paper is transformed to paperless format. In particular, the potential of electronic invoicing (e-invoicing) is stressed in studies when enterprises want to reduce their costs and administrative burden (Caluwaerts 2010; Potapenko 2010).

One element that we should take into further consideration is how these digital accounting innovations are made. To be more precise, we should concentrate on the early steps of the development process of innovations (Ojala et al 2012b). Thus we gain a better understanding on innovations and about the factors which need to be emphasized over the first steps of an innovation process by project management.

Actor-network theory (ANT) (Callon 1986b; Latour 1987; Law 1994) provides a suitable theoretical base for innovation studies as it acknowledges the collective nature of an innovation process. When we concentrate on the interplay and different views of the participants, we understand the fact that the success of the technical innovation, digital innovations in accounting, does not depend purely on technical attributes (Latour 1987).

The paper concentrates on the harmonization process of the mandatory payroll reporting in Finnish context. The harmonization process is organized to a project group consisting of several participants from both the public and private sectors. Under the circumstances, the aim of the project is to establish a standard that would harmonize the requirements of the mandatory payroll

reporting for Finnish employers. Several participants and their different requirements make the project complex and the execution of the project has been rather difficult and tardy.

The aim of the paper is to understand the factors which need to be emphasized in the beginning of the project in order to proceed. The research question of the paper is; *what are the critical factors in the early stages of the harmonization process of the mandatory payroll reporting?* The project will be discussed in more detailed manner in the fourth chapter.

In spite of common understanding that the digital accounting is the future, there are hardly any studies which concentrate on the mandatory payroll reporting. This paper aims to fulfil that gap in accounting literature and in parallel provide a contribution to the ANT-literature as it highlights the factors which need to be emphasized over the first steps of the translation process. In addition, the paper offers functional guidelines for governments with similar digitalization targets. Finland is one of the forerunners in the digitalization of the business environment and can provide an important example for other economies in the field of mandatory payroll reporting. In his study on the diffusion process of activity-based costing, Malmi (1999) indicated that Finland can be seen as a microscopic version of other nations as it has a rather similar institutional context to most industrial countries. In this sense the results of this paper might be helpful for other digitalization projects.

The structure of the paper is following. Section 2 presents the theoretical framework of the study. Section 3 discusses the methodology of the paper. In section 4, the data is analysed and in section 5 the contribution and limitations of the paper are discussed.

2. Theoretical framework

This paper is conceptually grounded on actor-network theory (Callon 1986b; Latour 1987; Law 1994). The objective of the paper is to understand the critical factors in the beginning of an innovation process. In order to understand the factors, critical success factors (CSF) approach (Daniel 1961; Rockart 1979) is combined with ANT. As ANT enables us to understand the fabrication of accounting technologies (Alcouffe et al. 2008), CSF helps us to understand what are the most important issues when an innovation process is managed.

In particular in information system projects, like the harmonization project, interactions between human and non-human actors are essential. In this case, the actor-network theory offers a fruitful basis for the research. Moreover, the actor-network theory does not make the separation between the sociological elements and technical elements that are studied (Hanseth et al. 2004). It is important to understand that both technical factors and people involved in projects are equally

important as innovations are developed. For this reason, ANT is a useful tool for understanding sociopolitical phenomena where technology plays an important role (Sarker et al. 2006). In addition, ANT does not concern the success or failure of an innovation process leans exclusively on technological characteristics. From the point of view of ANT, the result of an innovation process depends on how other actors accept the innovation (Latour 1987).

2.1 The concept of Actor-network theory

There has been growing interest in the field of accounting in sociology since the 1980s after Burrell and Morgan published their book *Sociological, paradigms and organizational analysis* in 1979, where they introduced the two-by-two model for sociological knowledge. The model helped accounting academics to link sociology to accounting research, which opened the way for more sociological studies in the field of accounting. (Justesen and Mouritsen 2011)

ANT follows this “sociological line” of accounting research. ANT was originally innovated for sociology of science and technology studies (Law 1992) but it soon found its way to accounting studies in the writings by Callon (1986a; 1986b) and Latour (1987). In the field of management accounting ANT-based studies seek mainly answers for two questions; what kind of roles accounting innovations play in society and how the management innovations are built (Alcouffe et al. 2008).

ANT emphasizes networks and their interactions when accounting phenomena are studied. In the simplest sense, ANT allows the observer a way to shift from one spot to the next when observing a network (Latour 1999). Here one must notice that Latour (1999) used the notion of observe instead of study on purpose, as researchers should abandon all a priori assumptions and concentrate on how the actors of actor-network structure their own world. ANT is anti-dualist and anti-reductionist as observations cannot be explained through certain classification (Justesen and Mouritsen 2011).

The concept of translation

Callon and Latour (1981) introduced the concept of translation practically in the same form as they have used it later on. Although, the majority of ANT-literature of accounting is based on writing from Latour (1987), this paper will use the presentation by Callon (1986b) when introducing the

concept of translation. Before the concept of translation is presented, a few words on actors of actor-network are addressed.

Actor-network consists both of human and non-human elements, which is commonly seen as the most controversial element of ANT (Sarker et al. 2006). ANT ignores the dualist distinction between human and non-human elements, in which case they can be treated in an equal manner. Latour (1987, 84) introduced the notion of actant, which is a synonym for both human and non-human actors, in order to leave the unnecessary distinction behind. Bijker and Law (1992, 13) indicated as well that ANT ignores the common sense assumption that people and machines exist in categories. Moreover, one must remember that the actants of the actor-network are consisted in networks as well. In other words, the actants of actor-network must be seen as a composition of numerous heterogeneous elements. Callon (1986a) admitted that a researcher has to make some simplifications for the study because it would be impossible to keep the study in control if all the potential actants were treated as heterogeneous networks. Callon and Latour (1981) used the notion of punctualization for this simplification.

Translation is the key notion of the actor-network theory. With the help of translation, researchers are able to analyze an innovation as it evolves. Translation is a process where the actants create interactions between themselves in order to achieve their goals over the change process (Chua 1995). If the translation process is successful, then several elements will act as one and a solution, in our case the payroll reporting standard, will become a black box (Latour 1987).

Callon (1986b) indicated in his case study on electric vehicles in France, how it was possible to understand an innovation process through translation without ending up in total chaos. In order to avoid the chaos, he introduced four moments of translation which were problematization, intersement, enrolment and mobilization. However, these moments cannot be seen as a linear continuum when translation occurs. Callon (1987) has criticized other research lines for their pre-established categorizing of the innovation process and emphasized that different moments of translation overlap and ignore chronology.

The first moment of translation is problematization. Even though the notion suggests that the moment is only a simple formulation, it is not. Over the course of problematization, the focal actor defines all the actants which are needed in the innovation process (Callon 1986b). In addition, it is important that the focal actor makes his own role indispensable. In order to make himself indispensable, the focal actant needs to “establish” an obligatory passage point for the other actants of the network. The obligatory passage point ties every actant to a process. When they attempt to achieve their individual goals, they must pass the obligatory passage point. In order to translate, the

actants should be willing to consent to detour. (Callon 1986a) Such problematization describes alliances between the actants and defines their common objective (Callon 1986b).

Interessement is the second moment of translation. Over problematization the roles of other actants were defined by the focal actant, over interessement these definitions will be tested by trials of strength (Callon 1986b). Only the actants that are brought into controversy and which have to defend their places are taken under the scope of actor-network (Callon 1986a). The actants can integrate into an initial plan or decline it by defining a project in other terms, like setting new goals. In addition, the focal actant has to compete with the problematization of other actants outside of the focal network, who want to define the actants of actor-network differently. To succeed, the focal actant has to cut the link between initial actants and other competing actants. Such focal actant needs to create a stronger link between him/her and other actants than his/her competitor (Callon 1986b).

Controversies play an important role over interessement as well. Over interessement, numerous negotiations occur when representatives negotiate on the behalf of the actors that are included in translation. This can lead to misconduct by the actors who are represented by the spokesperson. If actors ignore negotiated plans and act in a way that harms interessement, betrayal occurs (Sarker et al. 2006).

The third moment, when the roles of actants are defined and coordinated, is enrolment. This phase contains numerous negotiations between actants as the identities of actants are tested. As a result of the trials of strength and negotiations, the actants accept their roles and their relation to other actants. If interessement is successful it progresses to enrolment (Callon 1986b). Often after agreement inscription occurs, which means creation of an artifact that will ensure protection of certain interests of different actants (Latour 1992).

The fourth moment of translation is mobilisation. It must be noticed that here we cannot use the notion for the final moment because moments are not linear and they often overlap. Displacements are in the center of successful mobilisation (Callon 1986b). The target is to unify all the actants in order that the focal actant can speak on the behalf of the other actants, in other words, make one a spokesperson (Callon 1986a). To achieve this, all actants are displaced from their “normal environment” and then reassembled at the certain place and time (Callon 1986b). With the help of these displacements, the actants can build the constraining network of relationships.

In the center of translation is displacement or like Callon (1986b) stated: “to translate is to displace”. Displacement shapes the translation process continuously when balance is sought. Callon (1986a) and Latour (1986, 164) indicated that movement of the inscriptions (e.g. reports or survey results) between the actors is important when displacement is taking place and the network

attempts to achieve stable construction. Translation is to express the will of the actors in a single voice and for this a spokesperson is needed (Callon 1986a). If the translation process is successful, only unison voices are heard in the end. The actor-network forms its structure by translation, which is a process which goes back and forth before equilibrium is achieved or, in the worst case, the whole network of actors come apart.

Before the discussion over ANT in the field of accounting is presented more detailed, table 1. on the next page recapitulates all the important concepts of ANT.

Concept	Definition
Actant	Any element which bends space around itself, makes other elements dependent upon itself and translate their will into the language of its own.
Actor-network	Heterogeneous network of aligned interests, including people, organizations and standards.
Black box	Solution in which many heterogeneous elements act as one
Punctualization	Treating a heterogeneous network as an individual actor to reduce network complexity.
Translation	The process of the alignment of the interests of a diverse set of actants with the interests of the focal actant
Problematization	The first moment of translation, during which a focal actant defines identities and interests of other actants, which are consistent with its own interests, and establishes itself as an obligatory passage point (OPP), thus rendering itself indispensable.
Obligatory passage point	A situation that has to occur for all the actants to be able to achieve their interests, as defined by the focal actant.
Interessement	The second moment of translation, which involves negotiating with the actants to accept definition of the focal actant.
Enrollment	The third moment of translation, wherein other actants in the network accept interests defined for them by the focal actant.
Mobilization	Monitoring various interests of actants so they remain stable
Inscription	A process of creation of artifacts that would ensure the protection of certain interests.
Spokeperson	An actant that speaks on behalf of other actants.

Table 1. Working definitions of some of the central concepts of ANT (Sarker et al. 2006 modified)

2.2 Discussion on ANT

Latour (1988a) indicated that researchers should follow what the actants are saying and how they are building their own reality of a process. ANT assists researchers to understand the collective nature of an innovation building process and helps them to ignore all the a priori assumptions (Latour 1987). Later Latour (1991) indicated that the description of a network gives enough answers and there is no need to explain a situation with scientific accuracy because a network is rarely a stable situation. However, with the help of ANT, researchers can get closer to the truth when they describe the process as it happens (Latour 1999).

Baxter and Chua (2003) indicated that ANT-based research has made new alternative research lines possible in management accounting research. They addressed that with the help of ANT accounting, researchers have begun to understand how fragile accounting numbers are and what the factors influencing these numbers are. This emphasized the fact which is at the core of ANT; production of certain knowledge or innovation is a collective process (Latour, 1987) where different actants are attempting to reach their individual goals. In addition, Hanseth et al. (2004) pointed out that non-human actants have important roles in these processes, which ANT brings into consideration as well.

Another contribution of ANT is the concept of translation. Translation highlights how certain accounting procedures are converted into facts through negotiations (Baxter and Chua 2003). In addition, the use of the concept of translation produces appropriate understanding of accounting change. Like Justesen and Mouritsen (2011) stated; “accounting phenomena are never merely diffused, adopted or implemented; they are adapted and translated”. This clearly indicated that accounting change is more a techno-social process than purely technical, in which case the focus needs to be on the interactions of participants.

Nonetheless, Whittle and Spicer (2008) argued that the concept of translation clashes with the important tenet of ANT. ANT should enable research to observe a process like it happens and ignores all the a priori assumptions. However, Whittle and Spicer (2008) indicated that ANT assumes that translation occurs in all processes. In this sense, the concept of translation is a priori assumption and ties researchers to the concept. However, Whittle and Spicer (2008) argued that translation is a linear process although Callon stated the opposite and indicated that translation is far from a linear process (1986b).

Non-human actants are as important as human actants when networks are studied. ANT has brought non-human actants in the scope of social sciences (Callon 1999). Justesen and Mouritsen (2011) indicated that ANT enables researchers to understand the prominent role of technology when

organizational activities are formulated. Lowe (2001) agreed and indicated that it is important to take both human and non-human actants into consideration when accounting change is studied. Non-human actants (e.g. ERP-programs) play a prominent role in management accounting and often influence how human actants operate. ANT allows researchers to concentrate on interactions between these heterogeneous elements (Lowe 2001).

When the actions of a network are studied, ANT is based on total equality of human and non-human actants (e.g. Latour 1988b). Politics will not be understood correctly if researchers leave non-human actants out of the scope when interactions are studied. Whittle and Spicer (2008) criticized this radical approach by pointing out that non-human actants need human actants to operate, in which their political power cannot be positioned equally with human actors. In addition, Collins and Yearly (1992) argued that because of the verbal abilities of human actants, there need to be a distinction between human and non-human actants. Furthermore, Whittle and Spicer (2008) indicated that ANT presumes motives and purposes of the actants' actions. ANT is not attempting to problematize factors influencing action but take them for granted.

ANT ignores the traditional sociological dichotomies like micro/macro, subject/object, structure/agency and technical/social. ANT ignores these dualist views and lets researchers concentrate on structuring the accurate description of a phenomenon. ANT is able to take all the actants into consideration without categorizing them. It is easy to understand that the use of a priori models may be misleading. (Justesen and Mouritsen 2011) Latour (1999) indicated this as well when he stated that the purpose of ANT is to help researchers to ignore all a priori assumptions and gain a better understanding on a certain phenomenon. However, Bloor (1998) denied ANT's ignorance on the distinction between subject and object. Bloor (1998) indicated that Latour's (1987) argument that society and nature do not have any influence on the knowledge is wrong. Bloor argued "society is the necessary vehicle for sustaining a coherent cognitive relation to the world, especially a relation of the kind we take for granted in our science". Latour (1999) indicated that ANT does not ignore society or nature but takes them and other factors into account all at once.

Moreover, Whittle and Spicer (2008) argued that in reality ANT is not able to leave distinctions behind. They addressed that ANT-based research made this dualist distinction when they divided certain actors based on the classification between social and technical elements. In addition, Rachel and Woolgar (1995) argued that the participants of the technical projects made the distinction as it makes a process more understandable when these two elements are separated. In addition, Bloomfield and Vurdubakis (1994) argued that researchers need to make a distinction between social and technical elements. They stated that; "in this way we might hope to ensure that

decisions on these matters are chosen by the participants and not simply made by unexamined appeals to the technical”.

Collins and Yearley (1992) argued that ANT provides elaborate vocabulary on how the knowledge is made, but it does not provide any explanation on the fact why certain solutions are accepted and others are not. They indicated that ANT only describes a process but does not give any explanation whatsoever. Whittle and Spicer (2008) agreed with this by indicating that ANT cannot provide an appropriate answer to the question about why actants prefer a certain solution or knowledge over another. Latour (1997) argued that the explanatory power of ANT is its ability to describe a certain situation as accurate as possible. ANT does not force researchers to a certain mode but lets the researchers describe processes without a priori assumptions (Latour 1999).

ANT has brought the sociological view on the management accounting research as it indicates the importance of interaction between non-human and human actants. In this sense accounting systems and human members of organizations form allies that ANT is able to understand (Lowe 2001). When these interplays are studied, ANT-based management accounting research is concentrated for the most part on accounting innovations. Alcouffe et al. (2008) indicated that with the help of ANT researchers are trying to address two questions. First, what kind of roles do accounting innovations, which have reached the status of black boxes, play in the organizations and society? When this question is examined, the attention turns to inscriptions (e.g. accounting figures) that enable accounting systems act at a distance (e.g. Bloomfield 1995; Ezzamel 1994; Lowe 2001).

Second, ANT-based management accounting research focuses on a build-up process of accounting innovations. In other words, this research line concentrates on the question, how management accounting innovations are produced, modified and accepted. Especially the diffusion process of activity-based costing (ABC) is widely studied in different settings with the help of ANT (e.g. Alcouffe et al. 2008; Briers and Chua 2001; Jones and Dugdale 2002). ANT enables researchers to describe how certain events have a significant influence on a diffusion process. Alcouffe et al. (2008) indicated in their comparative study on ABC and rival accounting system that factors other than purely technical had a significant influence on the success of the diffusion of ABC. The study argued that the characteristics of the actor-networks that support the innovation need to be emphasized.

As the paper concentrates on the characteristics of actor-network in the given context, the aim of the paper is not strictly to follow the steps of the translation model (Callon 1986b) but to indicate the key factors that need to be emphasized when the focal actant tries to construct a

functional actor-network. As one seeks support for the original idea from the most robust network, the idea can gain the status of black box (Whittle and Mueller 2010).

This paper emphasizes the early steps of the translation process in particular and concentrates on the factors over interessement. Over the moment of interessement, the trials of strength occur and the focal actant attempts to build a stronger link between him/her and other actants of the actor network. Thus, the paper tries not to follow the flat ontology of ANT but increase our knowledge of factors which can make an actor-network more robust. Like Ahrens and Chapman (2007) stated, the contribution of ANT is best revealed in studies inspired by ANT rather than a straightforward application of it.

2.3 Critical success factors

The Critical Success Factor (CSF) approach dates back to the work of Daniel (1961) in the 1960s, although the critical success factor approach was popularized by Rockart (1979). The CSF approach provides a tool which helps management to understand what the key areas in their organization are. With the help of CSF's managers are able to emphasize these key areas and pay constant attention to them (Rockart 1979). These areas must be managed in an effective manner in order to ensure the success for an organization or a manager (Rosacker and Olson 2008). Like Rockart (1979) argued, "things must go right" in the key areas in order that an organization performs well.

The CSF approach has gained popularity in a project context as project management has become one of the key areas for companies (Belout and Gauvreau 2004). The CSF is particularly useful in the project context as project management need to prioritize several tasks. Like Jurison (1999) stated: "Project managers find CSFs particularly useful because most of their time is spent on dealing with a multitude of details and continuously "putting out fires". As a result, they rarely have enough time to focus on issues that are less urgent, but critically important, to the success of the project."

Over the years various project management studies have been performed that highlight different critical success factors in a project context (Belassi and Tukul 1996). However, Belout and Gauvreau (2004) indicated that the most important empirical studies concerning CSFs in project management have been performed by Pinto with co-authors. Pinto and Slevin (1987) created a framework for different phases of project implementation process that included ten factors related

to success of the implementation process. These ten factors were (1) project mission, (2) top management support, (3) project schedule, (4) client consultation, (5) personnel, (6) technical tasks, (7) client acceptance, (8) monitoring and feedback, (9) communication and (10) trouble shooting.

Rosacker and Olson (2008) indicated in their study on public sector information systems, that the portfolio of CSFs created by Pinto and Slevin (1987) provides a good starting point for public sector information system projects. However, they stated that the personnel is not a dominant factor over the information system processes. In addition, they highlighted the importance of guidance in respect to project management.

Moreover, Belout and Gauvreau (2004) agreed with Rosacker and Olson (2008), as their study indicated that personnel have not a significant impact on project success in the planning phase. However, the study stated that it is important to define the goals of the project clearly in the planning phase. In addition, in the planning phase perceiving clients' needs and top management support were important.

In the field of accounting, the majority of CSF-based studies concentrate on the implementation process such as the implementation of ERP systems (see Ehie and Madsen 2005; Somers and Nelson 2001; Umble et al. 2003). Studies identified several critical success factors which varied rather widely. Among these factors found in the studies were; top management support (Ehie and Madsen 2005; Somers and Nelson 2001; Umble et al. 2003), communication (Sommers and Nelson 2001), HR development (Ehia and Madsen 2005) and excellent project management (Umble et al. 2003). Moreover, Ngai et al. (2008) highlighted the diffuse nature of critical success factors in ERP implementation when they indicated that 18 factors and over 80 sub-factors were emphasized in ERP implementation studies. According to the study, the most popular factors were top management support and training/education.

Nagadevara (2012) indicated in his study that there are five factors that need to be emphasized in public and private organizations when it comes to project management. The study revealed that factors (1) organizational structure, processes and procedures, (2) empowerment of the team, (3) project control systems and (4) coordination and cooperation are equally important in public and private sectors when related to project management. The role of individuals (5) was more important in private sector than in public sector organizations. Although the main factors were limited to five in the study, the main factors embraced several sub factors.

Ong et al. (2004) studied the convergence of international financial reporting standards (IFRS) in Taiwan. They indicated that the most essential factors for the success of harmonization were the legal system and protection of business interests. The study addressed that the standards

should be compatible with native laws and the competitiveness of Taiwanese companies should be protected.

Chand (2005) studied the harmonization of financial reporting standards to IAS in South Pacific Island nations. The study provided five strategic factors which should be emphasized before the harmonization project. Chand indicated that law reform on harmonization facilitates the harmonization process when actors have to obey the standard and other versions are not allowed.

Ojala et al. (2012a) studied the critical success factors in the innovation process of a national standard for mandatory business reporting. They indicated that there are seven critical success factors that need be taken into consideration when innovations are produced. The following critical success factors were addressed in the study; (1) Win-win-win vision, (2) Execution, (3) Track record, (4) Commitment, (5) Scope definition, (6) Communication and (7) Passion. These critical success factors provide ground work for this paper as the context of the study was rather similar. These seven critical success factors are discussed in more detail in the fourth section.

3. Methodology and research methods

The paper is conducted on a qualitative approach. The aim of the paper is to understand factors that are important in the beginning of the complex harmonization project. As the standard is produced in collaboration between different stakeholders, there are several interactions between them. Ahrens and Chapman (2006) stated that for qualitative management accounting researchers the “reality” is constructed by interactions between the actors. The qualitative approach gives the researchers a wider scope to understand factors behind a certain process and not just satisfy themselves with the results provided. Moreover, the qualitative approach allows a researcher to understand the uniqueness and difference of studies (Parker 2012). Although the uniqueness of qualitative studies is commonly seen as a limitation as well, this might not be the case here. Qualitative field studies are useful for creating hypotheses that can be tested later in other environments (Scapens 1990). Here Finland might set an example for other industrial nations when the practice might be tested in rather similar contexts (Malmi 1999).

The data for the paper was gathered through semi-structured interviews. In order to understand all the different perspectives of the participants, a researcher has to position himself in their reality and understand the project in the same terms as they do (Blumer 1969). The semi-structured interview is an appropriate method in order to reach this position. Semi-structured

interviews are able to provide detailed information on a limited topic but simultaneously respondents are able to indicate their opinions freely in the setting produced by a researcher (Leech 2002). Thus all the necessary information is gained but the scope of the interview remains rather limited. In order to gain the necessary information on the harmonization project, representatives of all the key players were interviewed. The key players came from four different groups; receivers, senders, ministries and software houses. To gain insight into the senders' perspective, two financial administration experts of different accounting firms were interviewed. These financial administration experts were the founders and the CEOs of their own accounting firms and had several years of experience in accounting issues. Furthermore, six representatives of receiver organizations were interviewed. Representatives' organizations were Confederation of Finnish Industries, The Finnish tax administration, The Social Insurance Institution of Finland, Employee pension insurance companies, Accident insurance companies and Statistics Finland. These organization representatives gave insight into their different payroll information needs. The representatives of both Ministry of Employment and Economy and Ministry of Social Affairs and Health were interviewed in order to gain information from the perspective of public administration. In addition, two representatives of software houses were interviewed who brought the project insider perspective and the technical side of the harmonization project. Hence the total number of the interviews was twelve, on two occasions two representatives from the same organization were interviewed simultaneously, which made the total number of interviewees fourteen.

Semi-structured interviews contained 9-19 questions (see appendix 1) depending on which group an organization belonged to. The difference between the number of questions is explained through the fact that receiver and sender organization use the payroll reporting data in their daily business, whereas ministries and software houses do not. Because of the difference, more questions were addressed to receivers and senders to gain the understanding on how the payroll data is collected and used in the organizations. However, the main themes of the interviews were on how the potential outcomes of the project would affect organizations, what are the challenges in the project and what are the critical factors when the harmonization project is considered.

When critical factors were discussed, after an interviewees indicated the factors they felt were important, they were asked if they think that factors found in the study by Ojala et al. (2012a) were important for the completion of the development project. The findings by Ojala et al. (2012a) were asked in ten interviews. Each session lasted between forty minutes and an hour and was performed in Finnish. Hence it was ensured that interviewees were able to indicate their view in their native language. All the interviews were recorded, later transcribed and used quotations

were translated in English. Although the findings by Ojala et al. (2012a) were qualified in the interviewees, these interviewees were not related to their prior interviews.

The gathered data was analyzed with the help of Atlas.ti software, a qualitative data analysis tool. When the data analysis was made, the critical success factors method (Rockart 1979) was applied. The method is often used for the identification of pivotal factors that need to be emphasized over a project. In this paper the method is used for the identification of critical factors over the harmonization process that the interviewees highlighted in the interviews. These highlighted factors were then compared to the results of the study by Ojala et al. (2012a).

4. The harmonization project

The harmonization project of mandatory payroll reporting, which is named Fully integrated payroll (FIP), is a part of a large initiative called Real-Time economy (RTE). RTE is a joint development project by two software houses and Aalto University School of Business, which is set to improve the digitalization of the Finnish business environment and society as a whole. The RTE project contains a large number of different development areas, in which the FIP-project concentrates on the mandatory payroll reporting. The paper concentrates on the early development phases of the FIP-project.

The objective of the FIP-project is to reduce the administrative burden of Finnish enterprises which arises from the mandatory payroll reporting. In the current situation, all the enterprises have to produce and send the payroll information to different receivers, like Tax administration and Social Insurance Institution, separately. It has been estimated in an earlier RTE-project that enterprises are obliged to provide approximately 60 different payroll based transactions for different receivers annually. Moreover, the total cost of the payroll reporting is estimated to be 5.8 billion Euros annually (Ministry of Employment and Economy 2010).

In the FIP-project, attempts are made to reduce the administrative burden by harmonizing and digitalizing the mandatory payroll reporting. All the relevant stakeholders are linked to a FIP-project group, which attempts to integrate the mandatory payroll reporting standard in collaboration. As a result of the collaboration, the FIP-project aims to standardize the payroll reporting in order to reduce the administrative burden of payroll reporting. This leads to a situation where the majority of the mandatory payroll reporting would be replaced by the new standard, and as a result, fewer reports are produced and sent by employers.

4.1 Challenging the existing payroll reporting process through problematization

After the RTE-project had finished their work with e-invoices, it was time for new challenges. The next challenge on their mind was the mandatory payroll reporting, which caused a large amount of administrative burden for Finnish enterprises. The mandatory payroll reporting obligates companies to report payroll information separately for different receiver organizations. It was evident for the project team that improvements have to be made. The goal was set to develop a standard for mandatory payroll reporting in order to reduce the administrative burden for Finnish companies.

After the goal was set, the next step was the identification of the necessary actants. As enterprises were obligated to report payroll information to several receivers, some of the payroll information receivers have to be excluded in this point, so the project would not expand beyond control. The main priority for the selection of participants was based on the administrative burden that they caused for enterprises. As the result of negotiations, apart from the coordinating participants, Aalto University School of Business and two software houses (A and B), the participants of the project were following:

- Ministry of Employment and Economy
- Ministry of Social Affairs and Health
- Accounting company CEOs
- Confederation of Finnish Industries
- Finnish tax administration
- The Social Insurance Institution of Finland
- Employee pension insurance companies
- Accident insurance companies
- Statistics Finland

From these actants, the representatives of software houses A and B took the role of the spokesperson which can be seen as the most visible actant in new produced network (Sarker et al. 2006). Moreover, software houses A took the responsibility for project management to the next phase. Due to the pivotal role of software house A over the early course of the project, it can be identified as the focal actor in the FIP-project.

After the actants of the project were identified, it was evident that the new payroll reporting standard would be the obligatory passage point (Callon 1986b) in the project. For the identified

participants the obligatory passage point was not so clear cut. The aim of the FIP-project was to reduce the administrative burden of Finnish enterprises, and in that case the majority of the benefits occur for the senders of the payroll information. The challenge of the project management was to identify potential benefits for receivers as well as the majority of the participants were satisfied with the current situation. In addition, there was a possibility that they would have to modify their current functional practices in future if they wanted to be part of the FIP-project. This made the premise of the FIP-project challenging.

The project management understood the fact that in order to translate the participants should be willing to make the detour (Latour 1987, 121). The project management believed that real-time and better quality of information would be the benefits that would convince the identified stakeholders to take the detour through the obligatory passage point and begin to work with the payroll reporting standard. After these definitions, it was time to put these assumptions to test when the negotiations with the participants began.

4.2 Connecting stakeholders through interressement

The first moment of translation was hypothetical when the actions took place without involvement of the stakeholders (Callon 1986b). Next the project proceeded to interressement, where the assumptions made by the project management on participants were tested by trials of strength. The aim of the project management was to attract as many stakeholders of the identified project group as possible to agree with the claim (Latour 1987). But when interactions with the participants took place, the task was far from straightforward.

When the participants were brought to scene, the complex nature of the project was revealed for the project managers. Even though the participants employ the same payroll information, the applications of the payroll information vary rather widely between the receiver organizations. In addition, the majority of the information receivers were satisfied with the current situation. In this sense the current practices can be seen as competing actants between the FIP-project and participants.

The challenge for the project managers was to create a stronger link between them and the initial actants than the competing actants had (Callon 1986b). In other words, the project managers needed to convince the information receivers to take the detour so the FIP-project could take the next step and proceed to the next phase. In order to succeed, the project managers needed to

pay attention and emphasize certain factors so they can create a strong link between the FIP-project and participants, i.e. to boost their willingness to participate in the FIP-project.

In their study Ojala et al. (2012a) identified seven factors which need to be emphasized when embarking an innovation process. These seven factors are discussed next.

Execution

Execution was one of the success factors raised in the study by Ojala et al. (2012a). Project management needs to identify the key stakeholders and create the network. After the network is created, the required expertise for the project should be mapped and roles and responsibilities defined by the project management.

On ten occasions interviewees indicated that execution is a factor that needs to be emphasized in a project like the FIP-project (for the frequency of the answers see appendix 2). Particularly the definition and communication of the roles were emphasized. The FIP-project involves a large number of participants and development areas, in which case the roles and required actions need to be informed explicitly in order that the participants know their roles in the project. When the execution is performed well, it enables the participants to act as a network, not as discrete actants. In addition, explicit ownership of the project was highlighted on several occasions. The project is led by private organizations but public backing is needed. In this case one of ministries should advance the project and make it a relevant aim for themselves. The following quotations from the empirical data demonstrate the importance of successful execution.

I suppose that this (the project) is in an early stage. So this should be more organized; what are the roles and what should be done? (Representative of Ministry of Social Affairs and Health)

I'm afraid that acting as a network is the biggest weakness, as we have the sphere of authorities guided by budgets and every unit takes care of their own tasks. How do we get the whole entity moving at the same time? (Representative of the Finnish tax administration)

Every initiative should have a clearly owner who is responsible taking the initiative forward. (Representative of Ministry of Social Affairs and Health)

When the interviewees were asked, if they thought that execution was an important factor for the

completion of the project, all interviewees agreed. The definition of the roles should be made in co-operation with the key players, not independently by the focal actor. This was indicated in the following citation:

It would be better to define the scope of the project in close co-operation with the stakeholders. From my point of view, we were just taken into the project without anyone asking us. (Representative of Confederation of Finnish Industries)

Callon (1986b) also stressed the importance of the execution over the early moments of the translation process. In the beginning, the definition of the roles is formulated by the focal actor but that is a hypothetical postulate. In reality the postulate is tested during interessement. Latour (1987) indicated the collective and variable nature of the innovation process. The focal actor must be able to adapt to the changes over the course of the project when the actor-network modifies the original postulates made by focal actant.

Communication

Ojala et al. (2012a) emphasized the importance of communication as well. They indicated that in large projects involving several participants, efficient communication is an important element. In their study they indicated the pivotal role of the project management when it comes to efficient communication.

Nine interviewees indicated that communication is a crucial factor for the completion of the project. The need for regular communication in the course of the project and the developments of the project were brought up by these interviewees. In large projects like the FIP-project, developments often occur in small workshops or groups in which only a minor part of the participants are included. In such, the whole project group should be informed about the developments in the project. One of the interviewees compressed their opinion with the following citation.

Naturally it would be better if the participants were sent regular information packages that would inform everyone at which stage we are and what has happened. Obviously, something is going on outside the workshops. So, with the info packages one could get the hang of what is going on in the project. (Representative of Ministry of Social Affairs and Health)

This was noticed by the project management as well.

We have noticed that our communication has not been good enough nor clear enough or directed to the right quarters. Quite obviously we have not communicated plainly enough, so there have been misunderstandings. (Project manager, software house A)

When the interviewees were asked if they regarded communication as an important factor for the completion of the project, all the interviewees agreed. Even though they shared the same opinion they indicated that communication should not be overemphasized during the completion like the following citations indicate.

Communication, what do they say? At worst, a half of the success depends on communication. (Representative of Finnish tax administration)

Communication is important but it can't make miracles. Of course, communication is important, so that everyone knows which stage we are in, but you shouldn't overemphasize it. If an issue doesn't go the way it is meant to, it may be due to the fact that communication has failed, but most often the root of the problem lies somewhere else. (Representative of Ministry of Employment and Economy)

Communication as an important factor resonates well with ANT. The result of the actor-network co-operation is negotiated, amended and perpetuated through conversational interplays between the actants (Baxter and Chua 2003). The innovation process is a collective process where all the necessary participants must be convinced of an innovation in order to succeed (Latour 1987). For that reason convincing communication is an essential tool for the project management. As the examples indicate, participants require efficient communication in order to commit to the project.

Win-win-win vision

Another factor that Ojala et al. (2012a) raised in their study was the win-win-win vision. The factor reveals that the potential benefits of the project need to be explicitly defined and indicated to potential participants in the beginning of the project. In order to convince the participants and

merchandise the project for them, project management should be able to explicitly indicate how the prospective changes will have a positive effect on the operations of the participants.

Seven interviewees indicated that the win-win-win vision needs be emphasized in the beginning of the project. Particularly in projects with several participants, like the FIP-project, wherein the largest benefits of the project do not touch the participants of the project but other stakeholders, it is important to indicate potential benefits for all the different actants. In cases like this, it is important to understand different operation models of the participants in order to understand the potential benefits for each participant like the following quotations from the interview data point out.

Yes, benefits must be defined but not so that we fabricate them. I mean that we are not listening enough at the moment. I argue that we don't listen enough. We should be able to understand what the other participant of the project say and find the right benefits. We introduce benefits that we imagine because we don't know. We haven't acted on the other side, have we? (Accounting company CEO A)

These changes could provide a lot of work for the receivers. So then they will obviously consider if the benefits are large enough. (Project manager, software house A)

When the interviewees were asked if they thought that the win-win-win vision is important for the completion of the project, all the interviewees agreed.

The better participants are committed if they understand from the very beginning that everybody will benefit from this. (Accounting company CEO B)

It is important (win-win-win vision). If there is even one who thinks that this doesn't help now or in the future. Why would one attend this project? Then there is only legislative compulsory that one would attend. (Representative of The Finnish tax administration)

The win-win-win vision was seen as a significant factor by the interviewees and the importance is indicated by the ANT as well. Latour (1987) emphasized that the participants should be willing to make detour in order the translation to continue. In FIP-project, indicating the potential benefits for the participants is a proper strategy for advancing the willingness of other actants to make the detour. Moreover, when Callon (1986b) emphasized the importance of cutting the link between the

initial actant and competing actant by a certain strategy, the win-win-win vision can be seen as a solution to that.

Scope definition

Scope definition was a highlighted factor in the study by Ojala et al. (2012a). They indicated that scope definition composed of two reverse components that need to be considered. The aim of the project needs to be manageable and future change should not be too radical compared to current practices. However, simultaneously the work has to be large enough that it would have an impact on present ways of working.

Six interviewees emphasized the significance of scope definition before they were asked about it. The Interviewees highlighted that the aims of the project need to be clearly defined from the very start. It is easier to get people to commit to a project when it is explicitly indicated what the objectives of the project are. In terms of control, the project management has to make decisions on the participants and the trajectory of the project. The scope definition in particular was seen as a key element for the progress as it gives the framework for operating and increases comprehension of the project. The importance of scope definition is demonstrated in the following citations from the empirical data.

What belongs to this project and what doesn't? What is the aim of the project? What should this accomplish? These issues are not totally clear to me. (Representative of The Social Insurance Institution of Finland)

This should be a concrete package which can be introduced. That might be worth a thought. It doesn't work like this, so large law reforms will be made only through introducing the concept of the FIP. (Representative of Ministry of Social Affairs and Health)

We haven't knuckled down the ones whose potential benefits aren't awfully big because you can't develop everything. We have preferred the benefit perspective. (Project manager A, software house B)

When asked, all the interviewees agreed that the scope definition is important for the completion of the project. In this case the interviewees pointed out that the scope definition should be drafted in

co-operation with the key stakeholders when embarking on a complex project like the FIP-project. In addition, the control aspect was once again emphasized as it was considered better to proceed step by step, achieving one objective at a time, than struggle with an uncontrollable project.

Yes, I think it is significant. Maybe that has been partly a problem here that the scope definition was made at first and we accepted the form it was made. (Representative of Confederation of Finnish Industries)

Yes, the scope should be controllable but if shrinking makes it deficient, so which one is better or worse? Then the decision has to be made; is it made deficient and successful or are we going to take a risk and make amoeba that doesn't work. That is a decision that someone has to make. If I have to pick from them, then it is more important to achieve something than just to discuss the project for five years and achieve nothing. (Representative of Ministry of Employment and Economy)

The scope definition is an important aspect of the ANT as well. As the first step of translation, the focal actant must identify all actants that are needed for a project. This hypothetical definition will be tested over interessement as the actants approve or decline the assumptions in trials of strength (Callon, 1986b). This once again emphasizes the collective nature of making innovations when the focal actant must take different views into consideration. The scope definition is not a one time action and should be treated as an ongoing process, as it is not possible for the focal actant to identify all the relevant actants over the problematization (Sarker et al. 2006).

Commitment

In projects that are run through collaboration between the private and public sector, commitment was seen as an important factor for the completion of a project (Ojala et al. 2012a). Projects like the FIP-project involve several participants from different organizations that typically participate in the project on voluntary basis. In other words, the project management has no coercive power over the participants, and because of that, gaining the commitment of the participants is important.

Four interviewees indicated that the commitment to the project needs to be emphasized. Although a large number of interviewees did not indicate the importance of

commitment directly, they saw other factors, like the win-win-win vision, as a path to gain commitment, which can be seen from the following citations.

Yes, and then commitment in general. I think that the management (of the project) has not completely understood our special needs, and because of that they could not commit us well in the beginning. After we informed them on these needs, I have a feeling that they have acknowledged the needs better. (Representative of Confederation of Finnish Industries)

When the interviewees were asked if they thought that commitment was an important factor for the completion of the project, all the interviewees agreed. They all indicated that without commitment the progress is practically impossible.

Yes, it is an absolute requirement. The project will not be successful if the participants are not really committed to this. (Representative of the Social Insurance Institution of Finland)

Well, that goes without saying (the importance). (Representative of Statistics Finland)

This is probably the most important. . (Project manager, software house B)

When it comes to the ANT, commitment as a factor resonates well with it. The aim of the interessement is to get the actants to agree with the initial plan set by the focal actant (Callon 1986b), consequently to commit to the plan. It is important for the focal actant to gain support from other actants (Alcouffe et al. 2008). In order to do this, the focal actants must make all other actants committed to the project. Without commitment it is rather difficult to continue the translation journey to enrolment.

Track record

Project management's experiments with previous successful projects were seen as an important factor in the study by Ojala et al. (2012a). In particular, good track record increased the credibility of the project management and made it easier to commit participants to the project.

It is not that essential because one can bring a fresh view on the table even though one doesn't have earlier credit. However, on average the probability of success increases if one has earlier credit. (Representative of Confederation of Finnish Industries)

Of course it helps. Then one would have ready-made operation models and methods. Maybe in those (earlier projects) one has faced problems so he would know how to overcome them because problems will always come up. (Project manager B, software house B)

Track record is one factor that can be emphasized when an innovation process is studied with the help of the ANT. As numerous researchers (Sarker et al. 2006; Alcouffe et al. 2008; Justesen and Mouritsen 2011) have agreed, the translation process is continuously transforming. With the help of track record, controlling translation process might be easier. Like the interviewees indicated, project management with good track record possesses ready-made models on how to control a complex project. In addition, track record adds the credibility of project management, in which case it is easier to commit people to a project. Gaining support from pivotal actants is important throughout the translation (Alcouffe et al. 2008).

Passion

The seventh success factor found by Ojala et al. (2012a) was passion. General enthusiasm and positive attitude were considered important factors in projects involving a large number of participants. Particularly, when the participation is voluntary, the attitude and enthusiasm were regarded as highly significant for the success of the project.

In this project this factor, passion, was thought to be the least significant. One interviewee highlighted the significance of the factor before it was discussed. When asked, several interviewees indicated that passion is not important or it is not sufficient. In other words, passion was considered a good addition, but it was not as important as the other six factors highlighted by Ojala et al. (2012a). The lack of importance of passion is highlighted in the following citations.

It is important, but it is not sufficient alone. (Representative of Ministry of Employment and Economy)

It is a requirement, when tackling new challenges, but it doesn't help alone. In this kind of project,

it is significantly important because none of the participants are working on their core business in this. (Project manager, software house A)

Not necessarily. If it is dealt with as duty then it nothing else is needed. (Representative of Statistics Finland)

When it comes to the early moments of translation, the most important aim is to commit all the necessary actants to the project with the help of the obligatory passage point (Callon 1986b). After the actants have agreed to make the detour, then passion enters the stage. But over the problematization and interessement, the passion is often the attribute of the focal actor.

Political power

In the course of the interviews, one context-related factor was revealed on several occasions. The interviewees emphasized the importance of political power nine times. The factor overlaps with the win-win-win vision but as it was highlighted in the majority of the interviews, it is discussed as an individual factor.

The interviewees indicated that several information receivers are operating by the law. The frame of the actions is based on the law and they have to deal with it. If the project wants major changes to take place, the change has to begin from legislative issues. Even though the participants share a common interest in bringing about change, they cannot change their current practices because the practices are based on the law. In order to make legislative changes, the project needs to commit political quarters to co-operation. The political quarters need to have political power and will to advance the aims of the FIP-project. The standard should be compatible with native laws so that it could be adopted (Ong 2004). In this case law reforms are needed in order to establish a standard that reduces the administrative burden. The following citations from the empirical data highlight the importance of political power.

We have to obey the law on daily allowance issues. Many stakeholders are possibly in the same situation, they have their laws to obey. So should those (laws) be changed first and then other things can be changed. (Representative of the Social Insurance Institution of Finland)

A year ago, in the first meeting I remember there being great visions in the air far away from the ground level view even though they are really good aims. I doubt if the RTE has such influence on decision makers. If we want really to simplify the reporting, then legislative changes are required. There has to be weight and will from the political side so this project would proceed. Because of that, it demands powerful leadership from state authorities if this (the project) is expected to be successful. (Representative of Federation of Accident Insurance Institutions)

A comment came from the tax administration of Denmark that a political decision has been made that by the year 2015 Danish citizens will be denied the use of paper in public administration. We are completely missing this. (Representative of The Finnish tax administration)

Producing an innovation is a collective process in which the focal actor needs several other actants to complete the black box (Latour 1987). Latour indicated (1987, 169) that in a certain context the focal actant needs to link his/her fate to that of a more powerful actant. In this context, political quarters are powerful actants that might create a fruitful ground for changing current practices. Moreover, Alcouffe (2008) argued that intersement strategies can alternate between different participants and one strategy can be political. In this sense the FIP-project would be a solution to the national challenge as the government attempts to reduce the administrative burden.

5. Conclusion

This paper examined what kind of factors need to be emphasized by project management when embarking on an innovation project. In this paper the factors were studied through an innovation project which aims to produce the standard for the mandatory payroll reporting in the Finnish context. As an offset to this paper was the study by Ojala et al. (2012a), in which they studied the critical success factors in the innovation process of a national standard for mandatory business reporting.

5.1 Theoretical implications

ANT-based innovation literature has earlier concentrated on the dichotomy of success/failure when innovations are assessed. This paper left the dichotomy behind by focusing on the interaction inside

the actor-network. Alcouffe (2008) pointed out in his study on the diffusion of management accounting innovation that the focus should be on the members of the actor network and on their interactions. In this sense this paper contributes to ANT literature as it concentrated on the factors that need to be considered by the focal actant when embarking on the innovation process. In addition, the paper indicated that ANT emphasizes these important factors intrinsically in the writings by Callon (1986b) and Latour (1987). Moreover, this paper links critical success factors studies to ANT as it highlights the key factors of project management as they seek to construct a viable actor-network. These factors enable a focal actant to build a stronger link between him/her and other necessary actants, which is important for a viable actor-network.

This study revealed that there are six factors that project managers need to consider when they are embarking on an innovation journey. Five of these factors; execution, communication, win-win-win vision, scope definition and commitment resonate well with findings by Ojala et al (2012a). The importance of the factors is acknowledged in other critical success factor studies as well.

Pinto and Slevin (1987) indicated the importance of execution in their study although they used the term “personnel” for the factor. Pinto and Slevin (1987) stated that it is important to engage the right people in the project. Moreover, they also emphasized the project planning including the development of the appropriate project team. This study disagrees with the studies (Rosacker and Olson 2008; Belout and Gauvreau 2004) which indicated that the factor “personnel” lacks importance in the planning phase. Like Ojala et al. (2012b) and Nagadevara (2012) indicated in their studies, it is important for the innovation project to have suitable group members and clear responsibilities.

The importance of communication was acknowledged in various studies (Pinto and Slevin 1987; Nagadevara 2012; Sommers and Nelson 2001). The project management needs to create a good communication plan for the project and provide functional communication channels for the members (Hartman and Ashrafi 2002). This study revealed that project management has a large responsibility in communication when work is done in smaller groups. In this case better communication was demanded.

In order to motivate the stakeholders to participate in the project, project management needs to demonstrate possible benefits for the participants (Ojala 2012a). Pinto and Slevin (1987) used the term client consultation for this factor but the participants of the FIP-project relate to customers in this context. Belout and Gauvreau (2004) indicated as well that a profound understanding of the customer needs is important in the beginning of a project.

It is important for the project to have clear goals and objectives (Pinto and Slevin 1987). Even though this sounds self-evident, this study revealed the opposite. Hartman and Ashrafi (2002) indicated the importance of a clearly defined mission for a project. This study revealed that it is important to explicitly communicate the mission of the project with the participants in order to avoid misunderstandings.

Various studies indicate that the commitment of the top management supports the success of the project (Pinto and Slevin 1987; Ngai et al. 2008; Ehie and Madsen 2005). Top management need to be fully committed to the project and provide resources for it. This study reveals that in a collaboration project like the FIP-project, all the participants need to be fully committed to the project to make progress. Ojala et al. (2012b) indicated that expertise commitment is a fundamental factor for the success of the innovation project.

In the findings by Ojala et al. (2012a) two factors, track record and passion were more controversial. The interviewees indicated that these factors can contribute to the project, but they are not particularly essential for innovation projects. It was passion as a factor that was seen as a good addition but not as an essential individual factor. As to track record, the interviewees indicated that entrants can add a fresh view to the project although management with a track record adds know-how and credibility.

In addition to the five factors that need to be emphasized in the early phases of the translation process presented above, this study highlights the sixth factor that is more context-related. When a project contains mandatory elements, political power is essential. The standards need to be consistent with native laws in order to be adopted (Ong 2004), and in that case political leverage is needed. Chand (2005) indicated that with the help of legal backing, alternative models can be blocked. This is not the case here. Political leverage is not essential for blocking the alternative practices but to advance legal issues that help standard development.

All in all, when the findings of this paper are considered as a whole, three conclusions are addressed. First, the paper offered insight into the actions of the actor-network and indicated five factors that need to be considered by the focal actant at the beginning of the innovation process. These factors 1) execution, 2) communication, 3) win-win-win vision, 4) scope definition and 5) commitment are important when viable actor networks are built. Hence this paper offers an answer to the demand that characteristics of the actor-networks which support the innovation need to be emphasized (Alcouffe et al. 2008). In addition, the paper stressed that these factors were acknowledged in the writings by Callon (1986b) and Latour (1987). Second, when an innovation process involves statutory elements, 6) political power is essential for the project. Third, there is a hierarchical relation between the factors. This paper backed findings by Ojala et al (2012b) and

indicated that execution and commitment are fundamental factors. In addition, this paper added political power to the fundamental factors if the innovation project involves statutory elements. The other three factors, win-win-win vision, scope definition and communication are components that support the fundamental factors.

5.2 Practical implications

In the introduction was stated that the reduction of the administrative burden is a common goal for the EU countries (European Commission 2009). As the EU countries seek alternatives to reduce the administrative burden, the digitalization of mandatory reporting might be the answer. However, the digitalization is not enough when the reporting to several directions remains. In order to reduce the administrative burden, the EU countries need to standardize the mandatory reporting between different information receivers. Such standardizing actions may provide a solution to the reduction of the administrative burden and improve competitiveness of EU based companies.

When similar digitalization projects to the FIP-project are initiated, there are a few issues that need to be taken into consideration. First, the data of the paper suggest that political power is a must for these projects. If changes are made in mandatory issues, law reforms are needed. The project group needs political power to support their goals. So, a political quarter can forward necessary political issues that are needed in order to advance a project. Second, as the standardization project of mandatory reporting is made as collaboration between the public sector and private sector actors, the ownership of the project is essential. The data of the paper indicates that ownership of the project should be the responsibility of a public sector actor. This adds the credibility of the project and political power. When law reforms are needed to advance a project, it is understandable that the public sector actor leads the project as they have more leverage to law makers.

In addition, this paper offers practical guidelines for project managers when they manage similar innovation projects with several participants. The factors discussed; execution, communication, win-win-win vision, scope definition and commitment are tools. When project managers acknowledge the importance of these factors and succeed in their use, they enable better collaboration between participants, which increases the potential success of the project.

5.3 Limitations and future research

As the gathered data was based on a single project, the results of the paper are highly context-related. Because of this, the results need to be empirically qualified in another context. Moreover, the paper focused on a short phase of a complicated innovation process when the prospective success of the project was still unclear. This increases the need for empirical testing of the results after the project is finished. In that way we can gain understanding of the above mentioned results and learn whether the results are important throughout the innovation journey.

Future research need to concentrate on the factors that support the translation process and its success. Researchers need to ignore the intensive application of translation process when innovations are studied. It is important to understand what factors are important for the success in more general level, not only on a single case context. Thus we can learn important lessons of what are the key areas for project management to concentrate over the innovation journey.

6. References

- Ahrens, T. and Chapman, C. S. (2006), "Doing qualitative field research in management accounting: Positioning data to contribute to theory", *Accounting, Organizations and Society*, 31, 819-841.
- Ahrens, T. and Chapman, C. S. (2007), "Theorizing practice in management accounting research", In Chapman, C., Hopwood, A. and Shields, M. (Eds), *Handbook of Management Accounting Research*, Elsevier, Oxford, 99-112.
- Alcouffe, S., Berland, N. and Levant Y. (2008), "Actor-networks and the diffusion of management accounting innovations: A comparative study", *Management Accounting Research*, 19 (1), 1-17.
- Andersson, S. W. and Lanen W. N. (2002), "Using electronic data interchange (EDI) to improve the efficiency of accounting transactions", *The Accounting Review*, 77 (4), 703-729.
- Baxter, J. and Chua W.F. (2003), "Alternative management accounting research – whence and whither", *Accounting, Organizations and Society*, 28, 97-126.
- Belassi W. and Tukul OI. (1996), "A new framework for determining critical success/failure factors in project" *International Journal of Project Management*, 14 (3), 141-151.
- Belout, A. and Gauvreau, C. (2004), "Factors influencing project success: the impact of human resource management", *International journal of project management*, 22 (1), 1-11.
- Bijker, W. E. and Law, J. (1992), *Shaping technology/building society: Studies in sociotechnical change*, MIT Press, Cambridge, MA
- Bloomfield, B. P. (1995), "Power, machines and social relations: Delegating to information technology in the national health service", *Organization*, 2 (3-4), 489-518.
- Bloomfield, B. P. and Vurdubakis, T. (1994), "Boundary disputes: Negotiating the boundary between the technical and the social in the development of IT systems", *Information Technology & People*, 7 (1), 9-24.
- Bloor, D. (1998), "Anti-Latour", *Studies in History and Philosophy of Science Part A*, 30 (1), 81-112.
- Blumer, H. (1969), *Symbolic Interactionism: Perspective and Method*, Prentice-Hall, Englewood Cliffs, NJ
- Briers, M. and Chua, W. F. (2001), "The role of actor-networks and boundary objects in management accounting change: A field study of an implementation of activity-based costing" *Accounting, Organizations and Society*, 26 (3), 237-269.
- Burrell, G. and Morgan, G. (1979), *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*, Heinemann, London

- Callon, M. (1986a), "The Sociology of an actor-network: The case of the electric vehicle", In Callon, M., Law, J. and Rip, A. (Eds), *Mapping the Dynamics of Science and Technology*, Macmillan Press, London, 19-34.
- Callon, M. (1986b), "Some elements of a sociology of translation: Domestication of the scallops and the fishermen of the St Brieuc Bay", In Law, J. (Ed), *Power, Action, Belief. A new Sociology of Knowledge?*. Roudledge & Kegan Paul, London, 196-223.
- Callon, M. (1987), "Society in the making: The study of technology as a tool for sociological analysis" In Bijker, W. E., Hughes, T.P. and Pinch, T. P. (Eds), *The Social Construction of Technological System.*, The MIT Press, Cambridge, MA, 85-103.
- Callon, M. (1999), "Actor-network theory – The market test" In Law, J. and Hassard, J. (Eds), *Actor Network Theory and After*, Blackwell Publishers, Oxford, 181-195.
- Callon, M. and Latour, B. (1981), "Unscrewing the big leviathan; or how actors macrostructure reality, and how sociologists help them to do so?" , In Knorr, K. and Cicourel, A. (Eds) *Advances in Social Theory and Methodology*, Routledge and Kegan Paul, Londres, 277-303.
- Caluwaerts, P. (2010), "Towards a European electronic invoicing framework: Why businesses, service providers and consumers should switch to e-invoicing", *Journal of Payments Strategy & Systems*, 4 (3), 231-241.
- Chand, P. (2005), "Impetus to the success of harmonization: the case of South Pacific Island nations", *Critical Perspectives on Accounting*, 16 (3), 209-226.
- Chua, W. F. (1995), "Experts, networks and inscriptions in the fabrication of accounting images: A story of the representation of three public hospitals", *Accounting, Organizations and Society*, 20 (2-3), 111-145.
- Collins, H. and Yearley, S. (1992), "Epistemological Chicken" In Pickering, A. (Ed), *Science As Practice and Culture*, University of Chicago Press, Chicago, 301-326.
- Daniel, D. R. (1961), "Management information crises", *Harvard Business Review*, 39 (5), 111-116.
- Ehie, I. C. and Madsen, M. 2005, "Identifying critical issues in enterprise resource planning (ERP) implementation", *Computers in Industry*, 56 (6), 545-557.
- Ezzamel, M. (1994), "Organizational change and accounting: understanding the budgeting system in its organizational context", *Organization Studies*, 15 (2), 213-240.
- Granlund, M. (2011), "Extending AIS research to management accounting and control issues: A research note", *International Journal of Accounting Information Systems*, 12 (1), 3-19.
- Hanseth, O., Aanestad, M. and Berg, M. (2004), "Guest editors' introduction: Actor-network theory and information systems. What's so special?", *Information Technology & People*, 17 (2), 116-123.
- Hartman, F. and Ashrafi, R. (2002), "Project management in the information systems and information technologies industries", *Project management journal*, 33 (3), 5-15.

- Jones, T. C. and Dugdale, D. (2002), "The ABC bandwagon and the juggernaut of modernity", *Accounting, Organizations and Society*, 27 (1-2), 121-163.
- Jurison, J. (1999), "Software project management: the manager's view", *Communications of the AIS*, 2 (17), 2-57.
- Justesen, L. and Mouritsen J. (2011), "Effects of actor-network theory in accounting research", *Accounting, Auditing & Accountability Journal*, 24 (2), 161-193.
- Latour, B. (1986), "The powers of association", In Law, J. (Ed), *Power, Action and Belief. A new sociology of knowledge?*, Roudledge & Kegan Paul, London, 264-280.
- Latour, B. (1987), *Science In Action: How to Follow Scientists and Engineers through Society*, Open University Press, Milton Keynes
- Latour, B. (1988a), *The Pasteurization of France*, Harvard University Press, Cambridge, MA
- Latour, B. (1988b), "The prince for machines as well as for machinations", In Elliott, B. (Ed), *Technology and Social Process*, Edinburgh University Press, Edinburgh, 20-43.
- Latour, B. (1991), "Technology is society made durable", In Law, J. (Ed), *A Sociology of Monsters. Essays on Power, Technology and Domination*, Routledge, London, 103-131.
- Latour, B. (1992), "Where are the missing masses? The sociology of few mundane artifacts" In Bijker, W.E. and Law, J. (Eds.), *Shaping technology/Building society: Studies in sociotechnical change*, MIT Press, Cambridge, MA, 225-258.
- Latour, B. (1999), "On recalling ANT", In Law, J. and Hassard, J. (Eds), *Actor Network Theory and After*, Blackwell Publishers, Oxford, 15-25.
- Law, J. (1992), "Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity", *Systemic Practice and Action Research*, 5 (4), 379-393.
- Law, J. (1994), *Organizing Modernity: Social Order and Social Theory*, Blackwell, Oxford and Cambridge, MA
- Leech , B. L. (2002), "Asking questions: Techniques for semistructured interviews" *Political Science and Politics*, 35 (4), 665-668.
- Lowe, A. (2001), "Accounting information systems as knowledge-objects: some effects of objectualization", *Management Accounting Research*, 12 (1), 75-100.
- Malmi, T. (1999), "Activity-based costing diffusion across organizations: An exploratory empirical analysis of Finnish firms", *Accounting, Organizations and Society*, 24 (8), 649-672.
- Memis, M. U. (2011), "E-accounting: An evaluation of the Turkish case", *European Journal of Economics, Finance & Administrative Sciences*, 38, 155-163.

Nagadevara, V. (2012), "Project success factors and inter-sectoral differences", *Review of Business Research*, 12 (1), 115-120.

Ngai, E.W.T., Law, C.C.H. and Wat, F.K.T. (2008), "Examining the critical success factors in the adoption of enterprise resource planning", *Computers in industry*, 59, 548-564.

Ojala, H., Penttinen, E. and Virtanen, T. (2012a). "Exploring the critical success factors in the innovation process of a national standard for mandatory business reporting". AAA (American Accounting Association) Information Systems Mid-Year Meeting in Scottsdale, Arizona, 5-7th January, 2012

Ojala, H., Penttinen, E. and Virtanen, T. (2012b), Working paper, Aalto University School of Business.

Ong, A., Lin, W.-Y. and Hsu, H. (2004), "Internationalizing accounting standards the conflict of objectives and constraints", *Journal of Management Research*, 4 (1), 45-52.

Parker, L. D. (2012), "Qualitative management accounting research: Assessing deliverables and relevance", *Critical Perspective on Accounting*, 23 (1), 54-70.

Penttinen, E. and Hyytiäinen, M. (2008), "The adoption of electronic invoicing in Finnish private and public organizations", European Conference in Information Systems (ECIS), Dublin, Ireland, 8-11th June, 2008

Pinto, J. K. and Slevin, D. P. (1987), "Critical factors in successful project implementation", *IEEE transactions on engineering management*, 34 (1), 22-28.

Potapenko, T. (2010), "Transition to e-invoicing and post-implementation benefits. Exploratory case studies", Master thesis, Aalto University School of Economics, Department of Business technology

Rachel, J. and Woolgar, S. (1995), "The discursive structures of the social-technical divide: The example of information systems development", *The Sociological Review*, 43 (2), 251-273.

Rockart, J. F. (1979), "Chief executives define their own data needs", *Harvard Business Review*, 57 (2), 81-93.

Rosacker, K. M. and Olson, D. L. (2008), "Public sector information system critical success factors", *Transforming Government: People, Process and Policy*, 2 (1), 60-70.

Sarker, S., Sarker, S. and Sidorova, A. (2006), "Understanding business process change failure: An actor-network perspective", *Journal of Management Information Systems*, 23 (1), 51-86.

Scapens, R. W. (1990), "Researching management accounting practice: The role of case study methods", *The British Accounting Review*, 22 (3), 259-281.

Somers, T.M. and Nelson, K. (2001), "The impact of critical success factors across the stages of enterprise resource planning implementations", *Proceeding of the 34th Hawaii International Conference on System Sciences*, Hawaii.

Sutton, S. G. (2000), "The changing face of accounting in an information technology dominated world", *International Journal of Accounting Information Systems*, 1 (1), 1-8.

Umble, E. J., Haft, R. R. and Umble, M. M. (2003), "Enterprise resource planning: Implementation procedures and critical success factors", *European Journal of Operational Research*, 146 (2), 241-257.

Whittle, A. and Spicer, A. (2008), "Is actor network theory critique?", *Organization Studies*, 29 (4), 611-629.

Whittle, A. and Mueller, F. 2010, "Strategy, enrolment and accounting: the politics of strategic ideas", *Accounting, Auditing & Accountability Journal*, 23 (5), 626-646.

Internet sources:

European commission (2009), "Commission working document - Reducing Administrative Burdens in the European Union - Annex to the 3rd Strategic Review on Better Regulation"

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0016:FIN:EN:PDF>

read 24.3.2012

Latour, B. (1997), "On actor-network theory: A few clarifications. <http://www.nettime.org/Lists-Archives/nettime-l-9801/msg00019.html>

read 7.6.2012

Ministry of employment and economy (2009), "Yritysten hallinnollisen taakan vähentämisen toimintaohjelma vuosille 2009–2012: Toimintaohjelman edistymisraportti vuonna 2009"

http://www.tem.fi/files/26064/Edistymisraportti_2009.pdf

read 23.3.2012

Ministry of employment and economy (2010), "Selvitys yrityksille aiheutuvista hallinnollisista kustannuksista – taloushallinnon raportointi"

http://www.tem.fi/files/27457/TEM_8_2010_web.pdf

read 24.3.2012

7. Appendices

Appendix 1. Interview questions

1. How is the payroll information reported in your organization and what kind of information do you receive?
2. How do you utilize the payroll information?
3. Do you think that there are challenges in your current practices?
4. What kind of development needs do you or your colleagues find in the current practices?
5. Have you executed any action towards better effectiveness or do you have any plans to do so in future?
6. How has your organization attended the FIP-project?
7. How is your attendance organized?
8. How have you felt working in the project?
9. What kind of benefits do you see in the FIP-project for your own organization if the FIP-project succeeds?
10. What kind of challenges does your organization face if the project succeeds?
11. What kind of issues should be focused on if only the needs of your organization are considered?
12. What kind of benefits can be gained through the FIP-project if it succeeds?
13. What kind of challenges do you see in the completion of the FIP-project at the moment?
14. Could you describe what the roles of the participants in the project are?
15. What do you think about co-operation in the project and are the participants' interests taken into consideration fairly?
16. How would it be possible to take the participants' interest into account fairly?

17. What kind of factors need to be concentrated on in order to complete the project successfully?

18. Ojala et al. (2012a) have found seven critical success factors in their study. Do you think that these factors are important for the completion of the FIP-project?

Win-win-win vision

Execution

Track record

Commitment

Scope definition

Communication

Passion

19. Would you change the completion of the project if you had the opportunity?

Appendix 2. Frequency of the answers

Factor	Frequency		
	Type of question		
	Open-ended		Guided
Execution	9		10
Communication	9		10
Legislative backing	9		
Win-win-win vision	7		10
Scope definition	6		10
Commitment	4		10
Track record	1		8
Passion	1		8

