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Sector:

Materialisation and Enactment

By

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Abstract:

Based on an initiative to implement a new reporting model in the form of an intellectual capital statement, this article illustrates how three similar utility companies have adopted a new management technology, incorporated it into existing practices, developed and adapted it. The article is based on ethnomethodology using accounts where the data collection was mainly carried out through interviews with practitioners. The local context and the local actors have a decisive influence on the network creation taking place around the intellectual capital statement as an object, where the objects create room for different actions. It is concluded that the intellectual capital statement in the companies function as a conceptual framework for discussion about the future *raison d'être*, where existing initiatives can be integrated into a whole, and where one can target the effort for employee and competence development. It is moreover concluded that an actor with a strong position is necessary in order for the intellectual capital statement to be part of the management practice.

Key words: Case Study, Ethnomethodology, Intellectual Capital Statements, Electricity Sector, New Public Management, Actor-Network Theory, Enactment.

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Intellectual capital statements in the Danish utility sector: Materialisation and enactment

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Structured abstract

Purpose: This article shows how three similar utility companies have adopted intellectual capital statements as a management technology, incorporated it into existing practices, developed and adapted it.

Design/methodology/approach: The article is based on ethnomethodology using accounts where the data collection was mainly through semi-structured interviews with practitioners. The analysis is based on the actor network theory where the idea of an intellectual capital statement is enacted and materialised.

Findings: The local context and the local actors have a decisive influence on the network creation taking place around the intellectual capital statement as an object, where the objects create room for different actions. It is concluded that the intellectual capital statement in the companies functions as a conceptual framework where existing initiatives can be integrated into a whole. Further, it is concluded that an actor with a strong position is necessary in order for the intellectual capital statement to be part of the management practice.

Originality: Previous studies of intellectual capital reporting have been based on surveys or studies of the written reports and how they at a specific point in time were used in companies. This study is based on the researchers being present in the companies while the IC statements are developed, and on following the companies for 3-4 years. Thus, the focus is on the construction of the statements. Further, the methodology opens up new ways of understanding intellectual capital statements.

1 Introduction

The public sector has in many countries undergone a transformation where the public institutions in the name of management control have been ‘companyzed’ (Brunsson, 1994), ‘accountingized’ (Power & Laughlin, 1994), reinvented (Osborne & Gaebler, 1992) and reorganised (Lapsley & Pallot 2000). Rather than being an entity to carry out orders and strategies developed elsewhere, the public institution has to be an entity with its own strategy, where meaning and order are created in interaction with the actors outside the organisation. This reformation of the public sector, which in the literature is referred to as New Public Management (Hood 1991, 1995; Kettl 2000 Pollitt 1995), has, as emphasised by Stewart & Kimber (1996), meant that companies within the public sector are forced to broaden or rearrange their activities in relation to new needs and possibilities or to reconsider their working methods by e.g. reorganising or introducing new management practices.

In Denmark, the modernisation of the public sector has been taking place in various versions since the first modernisation programme was launched by the Conservative-Liberal government back in 1983; see Ejersbo & Greve (2005) for an overview of the development from 1983 to 2005. The modernisation can be associated with a number of specific reforms where e.g. accounting principles are changed to an accrual basis, where quality in the public sector is emphasised, and where accountability in a number of areas has been installed by the means of performance contracts, new financial reporting forms, benchmarking of service indicators etc.

Performance measurement and reporting, especially, have often been seen in the public sector as a way to increase accountability of public managers (Cavalluzzo & Ittner 2004, Jones & McCaffery 1997, Osborne & Gaebler 1993). As one of the modernisation initiatives promoting accountability, intellectual capital and intellectual capital statements have in some Danish public agencies, municipalities and companies been introduced both for internal management purposes and for external reporting purposes (Mouritsen *et al.* 2004, 2005).

This article analyses how three public utility companies have adopted intellectual capital statements as a new management technology, incorporating it into existing practices, developed it, adapted it and let it become part of the organisation or as is the case in one of the companies rejected it. The empirical basis of this article is three Danish local government public utility companies, Forsyningsvirksomhederne Aalborg, Roskilde Forsyning and Frederiksberg Forsyning, which each handles the supply of water, district heating and electricity as well as related services such as sewerage and refuse collection.

The three case companies all participated in a development project regarding intellectual capital statements initiated by the Danish Agency for Development of Trade and Industry, (see Mouritsen *et al.* 2001, 2002, 2004, 2005). We had the opportunity to follow the process by which the intellectual capital statements were developed. Methodologically, the paper is based on ethnomethodology using the notion of ‘accounts’ (cf. Garfinkel 1967; Scott & Lyman 1968). The primary data collection has taken place through interviews with practitioners based on their view of the situation account for the actions and choices made.

The remainder of the article is structured in the following way: In section 2 we outline what an intellectual capital statement is and what elements it consists of. Then the analytical framework is introduced in section 3 and section 4 describes the empirical basis of this article. The empirical results are presented and analysed in section 5 and 6 and finally, section 7 concludes the article.

2 Intellectual Capital Statement

Changes in the nature of value creation have been said to make new reporting metrics and frameworks necessary (e.g. Eustace 2001; FASB 2002; Upton 2001; Blair & Wallman, 2001). Consequently, firms, especially in the Nordic countries (Bukh *et al.* 2001; Mouritsen *et al.* 2001; Johanson *et al.* 2001a, 2001b), have started developing IC reports supplementing the traditional annual report.

The very idea of reporting about knowledge arose towards the end of the 1980s in Sweden as an attempt to give better external information about a number of non-financial key figures. So-called knowledge-intensive companies especially, e.g. consultancy companies, experienced a need to visualise the resources in the form of customers, employees and structures which were available in order to ensure the company’s value creation. The main quality of an intellectual capital statement is that it reports on the knowledge resources which in combination give the company the ability to act, to do something (Mouritsen *et al.* 2001).

2.1 Development of an IC reporting framework in Denmark

In 1996, the first steps towards the preparation of a template for an intellectual capital statement was taken in Denmark where the Danish Industry and Trade Development Council launched the IC-project in order to examine whether an intellectual capital statement could be a useful supplement to financial reporting. In two subsequent projects organised by the Danish Agency for Development of Trade and Industry (1997-2000) and

the Danish Ministry of Science, Technology and Innovation (2001-2002), respectively, a number of firms published IC statements and a guideline was developed based on these firm's experiences.

In the first project a tentative guideline (DATI 2001) was developed and in the second project this guideline was tested by a number of companies including the case companies. These companies developed their own intellectual capital statements and based on this experience researchers improved the guideline to the template which today lies in the Danish intellectual capital statement model (DMSTI 2003). See also Mouritsen & Flagstad (2005) for an analysis of the use of IC statements after the closure of the Ministry's involvement in the projects.

An intellectual capital statement is however, according to the Danish Guideline and the practice in the large number of Danish firms that have followed the guideline, not only a report with the purpose of communicating, it is also a part of the company's knowledge management, as the work with the intellectual capital statement involves an analytical phase in which a knowledge management strategy is prepared. The analytical part consists (cf. Bukh *et al.* 2001; DATI 2001; DMSTI 2003) of four elements: A knowledge narrative, a set of management challenges, attached efforts and indicators.

The knowledge narrative expresses how the company's service makes a difference to the user – the use value of the service. The knowledge narrative is also about how the company has arranged its knowledge resources to make it capable of supplying the use value. The knowledge resources are the mixture of employees, customers, processes and technologies supporting the use value. The knowledge resources and the use value are connected to a narrative – the knowledge narrative.

The management challenges are the number of challenges pointing to the knowledge resources which need to be developed or in other words strategies for what is required to create use value. The challenges may e.g. be the build-up of new expertise within a specific area. In prolongation of the management challenges, a number of *efforts* are inferred, each of which concerns something that is initiated in order to address the management challenges. The individual efforts are, in principle, short term, and one should be able to see results from year to year. It may e.g. be the appointment of a new type of employee. One or more *indicators* are attached to the management challenges and the individual efforts making it possible to follow up on efforts.

The Danish guideline on intellectual capital statements (DMSTI 2003) describes in more detail the elements and purpose of the intellectual capital statement and experiences from firms following the guideline is reported e.g. by Bukh *et al.* (2001) and Mouritsen *et al.*

(2001, 2003). Mouritsen *et al.* (2004, 2005) have specific focus on intellectual capital statements in the public sector.

3 Materialisation and Enactment: the construction of Networks

Organisational ideas such as e.g. activity based costing, quality management, performance contracts, benchmarking, or intellectual capital statements are part of the global management knowledge, which as packaged and labelled techniques travel between settings and spheres (Czarniawska & Joerges 1996). The metaphor of travel describes the circulation of ideas (see also Sahlin-Anderson & Engwall 2002) that emphasises that ideas or institutionalised recipes (cf. Christensen *et al.* 2007) do not flow automatically but as suggested by Czarniawska & Joerges (1996) follow highly structured routes where the ideas are carried from one organisational setting to another. In the case of New Public Management it has for instance been shown that the ideas were passed from one country to another (Boston *et al.* 1996; Hood 1995; Sahlin-Andersson 2001) and the recipe of an intellectual capital statement has similarly been passed on from the private sector to public sector companies.

Even if explicit recipes such as the *Guideline for Intellectual Capital Statements* (DATI 2001) exist, the ideas are not stable entities with fixed formats and content. They are shaped and reshaped while being circulated (Czarniawska & Joerges 1996; Czarniawska & Sevón 2005; Gherardi & Nicolini 2000; Latour 1986; Sahlin-Anderson & Engwall 2002) and, in specific organisations, materialised (cf. Røvik 1998) by leaving their mark on the organisation in the form of e.g. new routines or a theme which gains a foothold in the internal organisational discourse. In the same way, they may be found in the language of the employees as well as in the form of notions, rules and processes.

3.1 Materialisation through actors and actions

It is, as Czarniawska & Sevón point out, “easy to say that ideas must be materialized in order to travel” (*ibid.* 1995, p.10) and it is not very surprising that the ideas are materialised, i.e. turned into objects such as reports and documents. Rather, the interesting question in both theory and practice is what is spreading (Czarniawska & Sevón 1995) and how this process evolves.

Following Røvik (1998) materialisation should in this article be understood as what takes place when different actors and actions through a network of relations transform an idea into an object, such as e.g. an intellectual capital statement. The very idea about using the notion of actor and the idea about network originates in Actor-Network Theory (ANT),

according to which it is not only actors, i.e. "entities that do things" (Latour, 1992a, p. 241), but also the material things such as e.g. machines, texts, money and buildings which contribute to developing the patterns that constitute society (Law 1992) and forms organisations.

We focus on the chain of events following the introduction of the idea of an intellectual capital statement in the organisations, where events as emphasised by Czarniawska (2004b) do "not chain spontaneously: the actors or the observers tie them to one another, usually in the activities of *story making*" (Czarniawska 2004b, p. 779, original emphasis). Typically, researchers following Latour are 'concerned with the understanding of accounting in the context of human and non-human 'actants' (Baxter & Chua 2003, p. 102). This is e.g. expressed by Ogden (1997), where the analysis of privatisation processes in English water supply companies focuses on how notions such as 'customers' and 'customer service' are constituted through new types of financial control. Ogden's analysis also shows how new financial control targets help, 'at a distance', to carry through politically defined targets such as e.g. customer-orientation. In the same way, Miller (1991) analyses how discounted cash flow analyses in UK in the 1960s, were used to translate and incorporate a social problem of financial growth into the companies' practice.

We analyse in this paper how the idea of an intellectual capital statement is translated differently within companies of the same background and how it gains differing importance. This means that the translation or construction is seen as the grouping of actors in a network of entities. As we follow the firms over some years we observe how things change and how the relationships between the different actors in the network are renegotiated. Therefore we pay special attention to the different components of which the network consists.

3.2 Construction of the Network

The methodological approach behind ANT is often associated with Latour's (1987) statement, that one should follow researchers and engineers while 'science is in the making' as it is more giving "to be there before the box closes and becomes black" (Latour 1987, p. 21). Similarly action nets need "to be observed as they are being established and re-established" (Czarniawska 2004, p. 782). In the analysis of the network around the translation of the initial ideas, the network becomes a constellation of many different actors. It may be things and people, as well as techniques that become each other's preconditions. The actors may, as we shall see, be e.g. the intellectual capital statement, market orientation, culture, profile, budgets, strategies and management systems.

Even though any network is conditional, local and variable, there is still, according to Law (1992, p. 387), four general aspects. *First* of all, some materials are more durable than others and keep their relational patterns for a longer period of time. Thoughts and speech do not have long durability; it is not until they get a specific form by being incorporated into materials such as texts and buildings that they last longer. *Secondly*, there is mobility which is about orders through space and about acting at a distance. *Thirdly*, there is translation which is more efficient if one anticipates the response and the reactions from the material being translated. Lastly, there is the reach of the orders where it is possible to add some general strategies on translation to networks, e.g. strategies on administration and vision, which collectively work to generate multi-strategic agents, organisational arrangements and inter-organisational transactions (Law 1992, p. 388).

One of the points in analyses using actor network is ‘that things could have been different’ if other actors or other rationales had been involved in the network around a given process. Thus it is about getting close to the phenomenon which is being investigated to understand how it has arisen. As reality is dependent on peoples’ actions and interpretations, understanding facts is ‘the same task as understanding who the people are ... and ... to learn which associations are stronger and which are weaker’ (Latour 1987, p. 140).

In a case study of an ABC implementation, Briers & Chua (2001, p. 267) show for instance how the general ideas may be translated into research. They argue that an implementation is a fragile construction and that whether it becomes a success or a failure depends on the spin of strong and weak relations there are in a network. This also means that e.g. a management control or an intellectual capital statement is not effective in itself – understood in the way that it represents a higher form of truth – or that new cost systems work because they give more precise estimates of the same cost. Instead they say, as Latour (1987), that new financial control techniques can hold ‘facts’ and interests together and stabilise them momentarily. In this way they begin to become ‘true’. The consequences of this is that control and management may be ‘enacted’ successfully in different ways in the case companies, depending on which actors there are and how these actors choose to construct the supply company.

3.3 From Ideas to Actions

‘Enactment’ is about converting the ideas that have been transformed into objects, to actions. In order for this to be possible, it is, according to Czarniawska & Joerges (1996, p. 40), necessary that the idea is supplied with an ‘image of action’. It may thus be that an idea which previously has been perceived as unrealistic to convert into practice, slowly

gets an action image as a result of changes in other ideas and things, e.g. technology (ibid.).

The notion of 'Enact' may among other things mean to decide, resolve or ordain, but may also be used in the meaning that something takes place, happens or occurs. When the practitioners in the companies initiate something, they 'enact'. They may e.g. enact the intellectual capital statement, resource management or something else. However, the point is that something is taking place which is in the nature of an action and this often creates new structures which were not there before. In this way, the practitioners create meaning with an object through action. Weick describes it in the following way:

The term "enactment" is used to preserve the central point that when people act, they bring events and structures into existence and set them into motion. People who act in organizations often produce structures, constraints, and opportunities that were not there before they took action (Weick 1988, s. 306).

Weick emphasises that the result of 'an enacted environment' cannot be ignored. The product that gets out of enactment is not an accident, a post-rationalisation or a by-product, Weick writes (1988, p. 307), it is however a real, tangible, social construction which is the object of interpretations. That the object, e.g. the intellectual capital statement exists, cannot be questioned, but the importance, meaning and substance of the object can. Objects are without importance until one acts based on them and they then retrospectively are incorporated into events, situations and explanations.

3.4 Translation: The Local Creation of Public Opinion

The notion of 'translation' is used in this article as being central in the enactment which takes place. When actors act, a translation and a local creation of public opinion about the ideas which before were immaterial, airy notions take place. For example 'we must be market-oriented', becomes in some of the utility firms materialised to be about customer service, logos and participation in competitive biddings among other things.

The whole process may be said to be a translation, but we will especially take a look at the translation which takes place during enactment, i.e. when practitioners tell about their actions and justify them by reporting about the local importance that an act gets. The notion of translation is thus essential in the understanding of organisational change. Callon & Latour (1981, p. 279) understand, by translation, all the negotiations, intrigues, calculations, persuasive acts, violent actions, authorising an actor to act on behalf of another actor.

By emphasising that ones interests coincide, an actor persuades others to do what the actor wants. In this way others are translated into one single will of which the actor becomes

spokesman. The actor begins to act, not only for himself but on behalf of others and grows and becomes stronger, and in this way a micro actor becomes a macro actor, writes Callon & Latour (1981), who perceive a macro actor as someone who can act as one even though it is on behalf of other people. Thus it is by relations that the macro actors arise and are not something that is given in advance.

In contrast to the diffusion model of organisational change (Rogers 1995; see also Abrahamson 1991; 1996), the translation model (Latour 1986, p. 267) implies that the travel in time and space of everything which is in human hands, being demands, orders, artefacts and goods. Every single person can act in many different ways. They can drop an idea, modify it, deter from it, add to it or discontinue it. Another difference between the two models is that the initiating force in the translation model is not, according to Latour (1986, p. 267), more important than others. An idea which is being continued is completely dependent on whether the next relations are strong enough to continue it and the direction the idea takes depends on the individual people who handle it.

The diffusion model therefore *transmits*, and the translation model *transforms* ideas, as emphasised by Latour (1986, p. 268). The differences between the models are great, especially when one thinks about the use of the notions in practice. As an example we may take the idea of the free electricity market. There are great varieties between different countries as to how the general idea is being realised. In Great Britain it has for example taken place as privatisations; and in Australia by imposition of quasi markets for electricity, but by keeping government companies. This development has not taken place as a smooth move from one form of market structure; Rather, it has been a process where the characteristics of the market have been “re-formatted through extensive struggles and work” as Olsen (1995) concludes in an ANT analysis of the making of the market for electricity in Norway.

4 The Companies and the methodology

The article is based on a qualitative field study conducted in three different Danish electricity companies over a period of three years. Following Silverman (1993) and Ahrens & Chapman (2007) we focus on methodology rather than method and we see the qualitative methodology fundamentally as an alternative to positivism. In the empirical part of the paper we adopt ethnomethodology as the methodological approach, and the subsequent analysis of the materialisation and enactment of the intellectual capital statement in the three case companies, is based on descriptions of what the actors do and how the practitio-

ners in the individual utility companies as a community of members create and maintain order and comprehensibility in their social lives (cf. Ten Have 2004, p. 14).

4.1 Account analyses

The methodology opens up for analysis of the accounts of everyday actions which are normally not questioned as ethnomethodology, as stated by Czarniawska (2004, p. 6) and introduces ‘the notion of accountability’. This is also a notion used by Garfinkel (1967) who by this means ‘observable’ and ‘reportable’ (1967, p. 1) in the way that one e.g. sees and tells about a practical situation. Moreover, Garfinkel (1967, p. 3) emphasises that accounts are not independent from their social context. They must therefore be recognisable to appear rational.

In this study, interview is used to generate accounts. An interview should here be perceived as a staged situation where the researcher plays the role as ‘the stranger’ and the practitioners consent to tell about their actions (Czarniawska 2004, p. 91). The knowledge produced in an interview is always embedded in the context and the “unearthing of local meaning and uses of management accounting information” has, as mentioned by Ahrens & Chapman (2007, p. 310) often been regarded as central to the task of the qualitative researcher.

Originally, ethnomethodologists attached importance to analysing ‘natural’ conversations which are untouched, neutral and unbiased (Silverman 1985, p. 156). Thus, Ten Have (2004, p. 56) writes that to ethnomethodologists interview is more the subject, and observation rather than interview is emphasised as primary data source. Ten Have (2004, p. 75) however, recognises the interview in some form as method as it is often more efficient to invite people to a ‘special conversation session’ than to listen to what they are saying while they are busy living their ordinary lives. Silverman (1985) is more open to the interview and does not only recognise it as an object, but also as a resource in an ethnomethodological study because as he writes: ‘Interview data display cultural realities which are neither biased nor accurate, but simply “real”’ (Silverman 1985, s. 157).

In the companies, questions are asked such as: ‘has it changed to be a supply company during recent years?’ And ‘Does the external environment make different demands than before?’ This means that the interviewed parties are asked to account for their situation

and actions., according to Scott & Lyman, is ‘a linguistic device employed whenever an action is subjected to valuative inquiry’ (1968, p. 46). Such accounts may also be understood as sense-making, through which the participants by means of explanation, attributing, justification, description and in other ways find logic and order in the events, persons or actions which they talk about.

4.2 The data generating process

Interview is often perceived as a method of data retrieval, but in accordance with Baker (1997) and the ethnomethodological point of departure we just as much view the interviews on which this article is based as a process where data is being generated. Here the interview is understood as a process where the interviewer and the person who is being interviewed are both involved in generating a version of the social reality build up around categories and activities in a collaborative effort (cf. Kreiner & Mouritsen 2005).

The companies which took part in our project are three public supply companies and we have briefly presented the factual information regarding the companies in textbox 1. The companies all participated in the second part of the IC-project and we followed the companies in the period from August 2001 to the summer of 2004. In total about 100 companies participated in the project and they were organised in a number of groups with representatives from various industry associations facilitating the process. In the case of these three companies they participated in a group of nine public utility firms which were organised by the Association of Danish Energy Companies.

As a part of the IC project, the companies were interviewed twice in August 2001 and April 2002, respectively, just as five meetings among the group of supply firms were observed. In preparation for a more specific study of the utility companies’ work, an initial interview was carried out in each of the case companies towards the end of 2002. In the summer of 2003, a more comprehensive round of interviews were carried out in the three case companies where primarily the management group and other employees with influence on the change process were interviewed. Subsequently, a few clarifying questions have been asked by telephone.

Forsyningsvirksomhederne Aalborg (FA) handles the supply of gas, district heating, water and electricity and ensures sewers and refuse collection in the municipality of Aalborg. FA services close on 118.000 customers. The company is operated as a self-financing, non-profit business unit under the municipality of Aalborg and has 450 employees, of which 89 are employed in the administration. Besides from the political management in the form of the supply committee and the alderman, the company consists of the managing director who together with the administration handle the day-to-day management and operation. Moreover, FA is organised in separate divisions according to type of supply. As a consequence of the Danish Electricity Act, Aalborg Kommune Elforsyningen (AKE) has been divided into three companies: AKE Net, AKE Forsyning A/S and AKE Enterprise A/S. AKE Forsyning has together with five other North Jutland distribution companies created Nordjysk Elhandel to obtain sufficient capacity to operate on the liberalised electricity market.

Roskilde Forsyning (RF) handles the electricity, water and heat supply in the municipality of Roskilde and has approx. 40.000 customers. The company has 72 employees. By the end of 2000, RF got the opportunity to organise the supply departments in one place, and a new organisational structure with division according to work function was chosen as replacement for the old division according to type of supply. The services rendered by the supply department are 100% user charged. The electricity supply is divided into a network company which continuously will be a part of the local government services, and a supply duty company (Roskilde Energi A/S) which is 100% owned by the network company.

Frederiksberg Forsyning (FF) is in charge of the supply of gas, district heating, electricity and water as well as the drainage of waste water in the municipality of Frederiksberg. There are 180 employees to supply approx. 60.000 customers in Frederiksberg. FF is 100 % owned by the municipality of Frederiksberg. On 1 October 2000, the company was reorganised across types of supply, and a process organisation which shall ensure that FF can handle the free competition on the electricity market was created.

Textbox 1: The three case companies

Interviews

During the round of interviews in the summer of 2003, a total of nineteen interviews with managers and employees were carried out, allocated with nine, four and six interviews at Forsyningsvirksomhederne Aalborg, Roskilde Forsyning and Frederiksberg Forsyning, respectively. The individual practitioners in this article are identified by their initials¹. The interviews were carried out based on a thematised question guide and lasted typically between an hour and one and a half hours.

At the beginning of the interview, the interviewer briefly presents herself and tells that through the IC-project they have heard that, as a consequence of the new Electricity Act, there has been a development within their field, and thus we would like to hear more about this, based on the interviewee's experience of being employed in a utility company. The interviewee's are also informed that they get to review texts where quotes from them have been used.

Observations

Besides interviews, observations are also used where the meetings among the utility companies have been a source of inspiration to formulating the research questions, but the fur-

ther the project progressed, the less the observations seemed to be the right way to generate data. Observation has especially been used in Forsyningsvirksomhederne Aalborg where there has been full access to the meetings where the content and form of the intellectual capital statement was prepared.

However, in the two other companies there has not been the same participation of researchers in the meetings, partly due to the companies' way of working with intellectual capital statements and partly due to the geographical distance. The intellectual capital statements in the three companies have had very different 'lives', which has led to very different narratives and importance of the intellectual capital statement within the companies.

At the administration in Forsyningsvirksomhederne Aalborg (FA), the preparation of the intellectual capital statement has been a task for the management group, and it has been possible to observe the main part of the meetings in which the content of the intellectual capital statement 2002 and 2003 was created (eight and two meetings were observed, respectively). At Roskilde Forsyning (RF), the intellectual capital statement has primarily been a task for the finance and market manager; and Frederiksberg Forsyning (FF) prepared one single intellectual capital statement where it was an HR consultant who was responsible for it. During the meetings, catchwords were written down about the process and the notes were augmented afterwards with impressions etc from the meetings.

4.3 Quality Criteria of the Study

In qualitative studies *reliability* is related to the consistency of the results, interview, transcription and analysis, in such a way that special attention is paid to minimise the errors and biases i.e. by raising leading questions. *Validity*, in comparison with this, concerns, according to Kvale (1996, p. 238), the conformity of the phenomenon studied and the way it is studied. The question of reliability takes as Ahrens & Chapman (2007) emphasise a different significance in qualitative studies that are not characterised by the use of research instruments, even though they might be used as is the case in this dissertation, where a loosely structured, thematic interview guide has been used

Social reality is fundamentally context specific and the interviewees "can, and do strive to undo their history and invent new concepts, images, and ways in which they want them to infuse action" (Ahrens & Chapman 2007, p. 311). Therefore we have, on the one hand no hard data in the form of e.g. questionnaire data that can be subject to statistical tests and on the other hand a number of contextual factors, including that the dialog with the researcher and the researchers framing of the interview and the researchers theoretical interests cannot be separated from the data. This means as also emphasised by Ahrens &

Chapman (2007) that we “should not expect identical results when two researchers study the same organisation from different points of view” (Becker 1970, p. 20), but we should expect that “the conclusion of one study does not implicitly or explicitly contradict those of the other” (ibid.). Thus, the methodological considerations in this thesis will primarily emphasise validity, but pay due respect to implications with respect to generalisations and reliability.

Miles & Huberman (1994) discuss the standards which can be established for the quality of conclusions to qualitative studies, because as they say one cannot avoid the problems with quality, reliability, validity and authenticity in the results of the study. Also Silverman (1985, p. 113-115) emphasises that the researcher’s claim about validity is completely dependent on whether the features demonstrated by the researcher are representative, not to a population (as in a quantitative study), but to the general theoretical principle as he argues that the purpose of case studies is to show general theoretical principles. Here their criteria to internal validity and external validity shall be related to this study:

Internal validity: The central question to answer in relation to internal validity is whether the conclusions make sense. Have the conclusions been arrived at through a disciplined imagination (Weick 1989) and are they plausible rather than abstractly true (Kreiner & Mouritsen 1995, p. 172; Weick 1989). Do the conclusions make sense to the interviewees and do they make sense to the readers? In other words, has an authentic portrait been given of what has been studied.

The interviews were taped and subsequently transcribed word by word. Another factor which may be said to strengthen the authenticity is that in the presentation of data very often questions and also whole interview sequences are included. Therefore, as a reader one may contribute to evaluating the data as it is.. Thus the questions are included in the account which the interviewee gives as often they are not as open as in ethnographical interview methods. In the presentation of the retrieved material, the data generation and data analysis have as earlier mentioned been described to the reader and the interviewed practitioners have all had the possibility to comment on the way in which their statements have been presented. Moreover, the use of observation has been discussed and what limitations there are in the data retrieval as it has taken place in practice.

External validity: The central question here whether the results can be generalised and transferred to other areas. Whether this is possible in a qualitative study depends on if the results can be connected to theoretical notions reaching across the existing theoretical study and since the expansion builds on theoretical notions ‘borrowed’ from other areas that are put into perspective with theory about identity as an organisational and company-related phenomenon. It is also to be expected that the cultural context plays a role and that

it is primarily in Danish or maybe even in Scandinavian context that the results may be generalised.

5 Materialisation of the Intellectual Capital Statement

Intellectual capital statements may in practice be very different and companies may introduce them with very different purposes (cf. Bukh *et al.* 2001; Mouritsen *et al.* 2001) as it is a general model which first, in its local context gets importance and content by creating relations to other actors and on that background creates room for action.

In this section, we take a look at the process behind the preparation of the intellectual capital statements within the three companies, very much in keeping with Latour's idea (1987) about 'science in the making', and in the next section, we are going to follow the intellectual capital statement 'in action' and see how the local object, the intellectual capital statement, is used, what purpose it serves and which use or importance it gets (or does not get) within the different companies.

5.1 Forsyningsvirksomhederne Aalborg

Forsyningsvirksomhederne Aalborg (FA) started preparing their first intellectual capital statement in the summer of 2001. Although the initiative to participate in the project on intellectual capital statements was taken by the vice-director, HC, the very preparation of the intellectual capital statement the first two years involved the management group of the whole administration, a total of nine persons.

The First Intellectual Capital Statement

The management group used the guideline on intellectual capital statements and started the whole process by a theme day during which they discussed questions e.g.: 'What is our task? Why are we here?' tells JS, and HC supplements: 'Yes, what is it that entitles us to be here ... that is, we tried to identify what use value we have. This is what we aimed for and actually managed to sum up in a single line.'

In the following interview sequence, the management group tells about the first period of preparing the intellectual capital statement:

HC: ... we actually started out with the knowledge narrative and there was a copy of the section in the guideline to each individual employee which we then could just try to go through to be able to say: 'Well, it is then these things here'. Then we got some items thrown in – or up on the blackboard, and then afterwards they were then written together with a little prose.

EH: As a supplement to that, we have then taken a look at the other firms' examples and seen what others have found out in their wisdom.

JS: We also had a discussion of which core areas we have and what is also in the future ...

EH: No, but we have had a parallel process in this, and that is what we shall use in our strategy plan. It is very much related to this, you could say. What kind of challenges do we get from the external environment and from society in the future?

Interviewer (I): So it is such a parallel course where they complement each other somewhere.

EH: Yes ... as I recall the process ... But is it really for the intellectual capital statement, or is it really for the strategy plan. It has been such a mix across. (I: Yes...). Where I would say that the process, it is some of that, that is perhaps more profitable than the result.

I: How did you then move on from there? How did you reach the management challenges?

HC: Yes, but that was again that on the basis of the – should we say, should we call it – brutto list we had prepared to create that use value and production terms and what kind of people is it we had – really. So then we say: 'But what kind of challenge is it then we see in this'. And we then try to list it up. And it was probably there where we could say that we have made an experience that there we try too much to cover it all up and thereby lost a little bit of, should we say, what may be read from direct measures. ... I mean as point of departure we made five management challenges and then we tried to put some prose on it and then we went through one or three more processes and then we say: 'But okay, how does this hang together?' And then we got this out of it. And had we then gotten it all with? And it is probably there you will say that the experience shows that we should probably have stuck to saying: 'This is what we want!' – And not whether we get it all with. That was what we made. Then we started to take a look at what this should end up in – efforts. And there we did it again that in principle we made a big brutto list. And that is then actually the one we have entered into the accounts where we then say that is the possible and these are the ones that we will start working with and again try and see if it then agrees with what we have written earlier and so on.

I: How then with finding the indicators? Have you had much of that in advance or will there also be some of that where you are going to initiate new things to accumulate what you want?

HC: I mean basically only there was one single indicator, which we constructed – or two; it was the one with information expenses. We had the figures, but we just had to divide it. And the other one was inter-disciplinary projects and it was what we concretely counted what we could think of. Where again we put it up on the blackboard and saw how many inter-disciplinary projects we then had had that we could identify in this way and there we reached 40, but if it was 44, or it was 43 ...

GN: It was in any case more, but it was the most essential that we found at least.

The first actor in the network is the vice-director, HC, who becomes aware of the existence of the IC-project. As we see from the interview sequence, the management group becomes enrolled in the preparation of the intellectual capital statement and copies of the section of the guideline on the knowledge narrative are included as an actor which on

management group meetings are used as to help define the company's raison d'être, but also to look forward in time: Which core areas do we want in relation to the challenges we expect in the future? It is also difficult for practitioners to distinguish between what belongs to their 'ordinary' strategy process and what belongs to the project on intellectual capital statements.

Moreover, a blackboard is included as an important element. On the blackboard, the inputs given by the individual practitioners are noted. Later a selection of the proposals which can create relations that are strong enough to be included as a part of the content of Forsyningsvirksomhederne Aalborg's intellectual capital statement takes place. However, there is also awareness of the cognitive limits within the group in the sequence. Thus, HC states that if one tries to 'cover it all' in the management challenges then the direct measures may lose something, he believes. This should be understood in the way that the management challenges become too specific and almost resemble measures because they try to cover the challenges which the individual office is facing but not all of the challenges and thereby the overall challenges often become lost in the details. Finally, the counting of activities and retrieval of data from the IT-systems contribute to the provision of the indicators in the intellectual capital statement. Figure 1 illustrates how the network can be outlined.

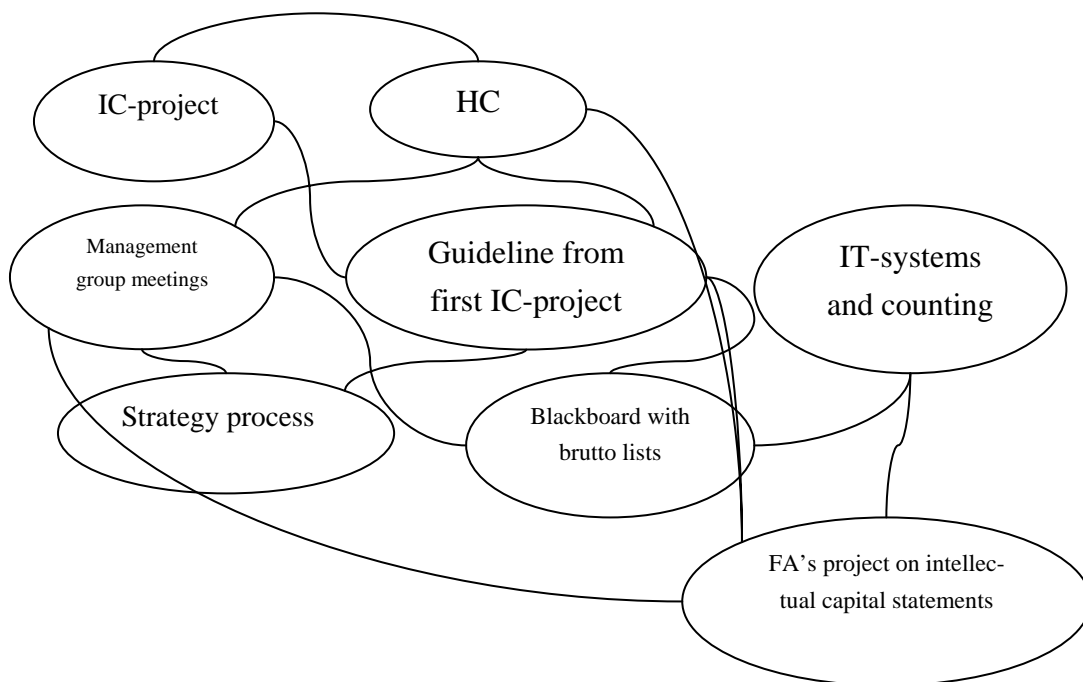


Figure 1: Actor network over the construction of Forsyningsvirksomhederne Aalborg's intellectual capital statement 2001

The Second Intellectual Capital Statement

In the process around the preparation of the second intellectual capital statement for the following year, the point of departure was the document from the year before, especially where the management challenges were readdressed. The eight management challenges were reduced to one overall management challenge and three subordinate challenges related to employees, culture and processes, which shall contribute to ensuring the overall challenge, the aim of which being; 'that the customer experiences the company performing a little bit more than expected'. The customers therefore has a more central role than previously.

In this second process the working method of the management group changed. The first year, the whole intellectual capital statement was basically a result of the joint management meetings where the vice-director afterwards compiled the document. The second year, the work still took place as a parallel process to the strategy process. The management group was enthusiastic about the process steps and schemes included in the 'Intellectual Capital Statements – The New Guideline' (DMSTI, p. 25).

It was especially JB, JS and TE who made themselves spokesmen for this tool, and on their own initiative JS and TE worked together on one of the management challenges and filled in the scheme:

JN: ... we have obtained some good discussions – not only at our meeting in the working group, but mostly in the small working groups which we have had where we have helped each other and have posed each other the impudent questions, teased each other a little bit and helped each other again. That, I believe, has been really good.

The new working methods have meant, explains JB, that: 'It has been a whole different process this year where we probably feel more ownership. At least I do'. The proposals of the individual working groups were then discussed at management group meetings, adjusted and finally compiled. The indicators were again found by means of counting and data from the IT-systems.

Even though the process was beneficial, it was also long. HC explains: 'There have been many problems. It is not the very intellectual capital statement as such, but more that it was in the process of moving that we made intellectual capital statements, it was difficult to get the different office managers to concentrate or take interest in very much of it. I think that too many times I needed to crack the whip to make them participate in some of these things'.

And there was also a time where the whole project was about to be dropped because in terms of time they were not able to complete the intellectual capital statement so that it could be presented to the Utility Committee at the municipality. But HC was given the

green light to make it go directly to approval in the city council where they were oriented by the end of April 2002.

Other relations were created this year where the working groups became a central element in the preparation of the intellectual capital statement as illustrated in figure 2 below.

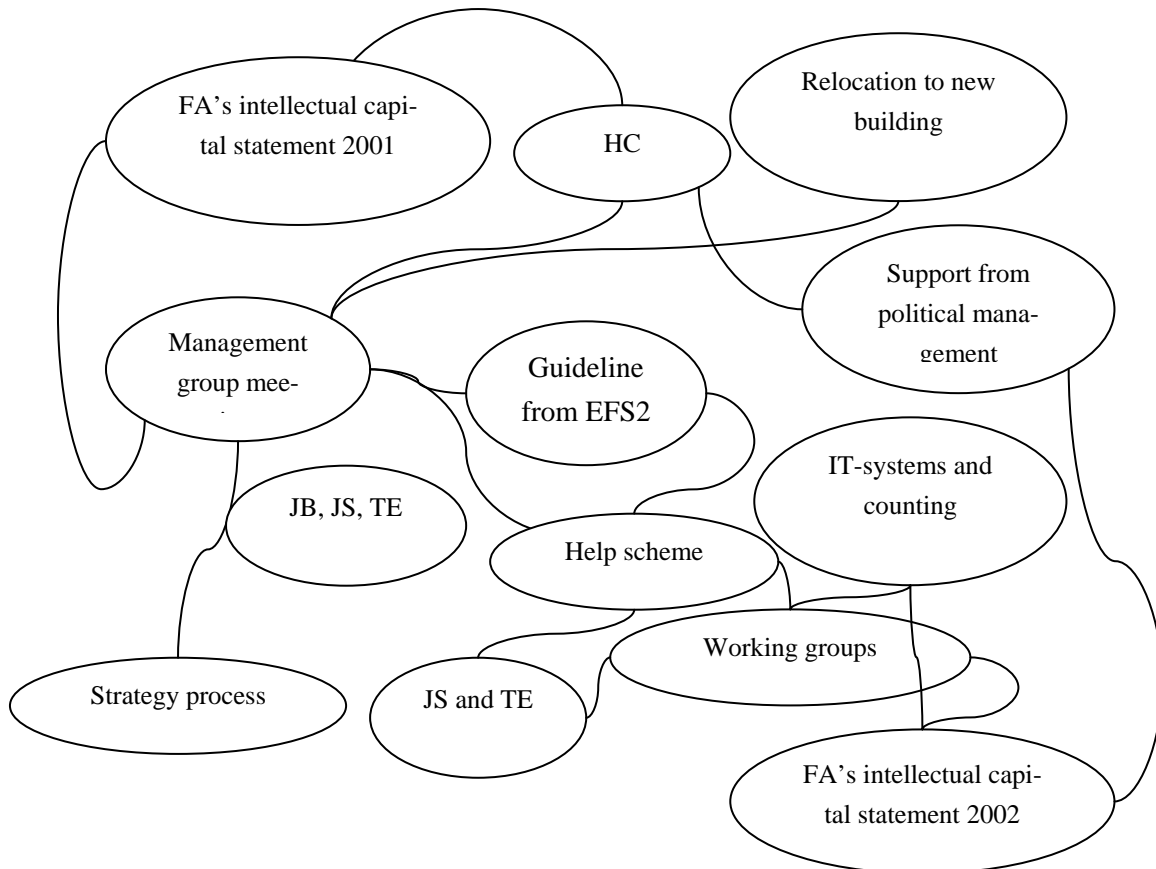


Figure 2: Actor network over the construction of Forsyningsvirksomhederne Aalborg's intellectual capital statement 2002

The Third Intellectual Capital Statement

The third year, 2003, they made another change of style in the working process. Due to the long-term process during the previous year, it was no longer the whole management group which handled the preparation of the intellectual capital statement this year, it was only four managers. Likewise, the process this year was not a parallel course to the strategy process, but a part of it. As the overall strategies were in place, the intellectual capital statement 2003 was prepared during 4-5 meetings. They had also chosen that this year there should not make big changes so it is primarily specifications, improvement and updating of the intellectual capital statement 2002 which is in question.

In the third process, we see that the change of address, as an external factor in the second course, affects the third course. HC experiences in the second course that it is difficult to mobilise interest and therefore chooses to place the third course on fewer hands. At the same time, he makes a choice about limiting the renewal of the intellectual capital statement this year. This year's network is illustrated in figure 3 below reflecting that the intellectual capital statement 2002 is central and that the network has 'shrunk' [sic] in relation to the year before.

One thing is however new each year and that is that the company has a particular topic that has been decided the year before, which they follow up on. As the process was started, it was the educational plans which were the effort, then it was the project work and the third year it was the description of the procedures which got special attention. In this way, Forsyningsvirksomhederne Aalborg uses the intellectual capital statement to target the effort to the future.

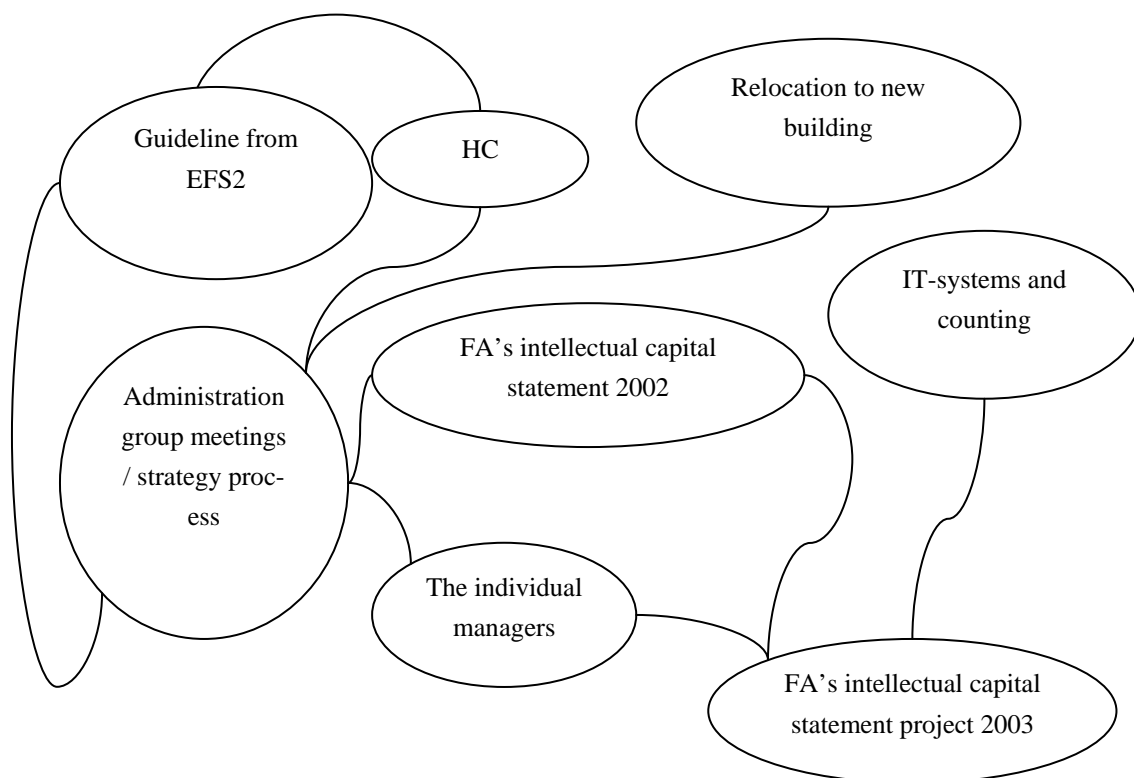


Figure 3: Actor network over the construction of Forsyningsvirksomhederne Aalborg's intellectual capital statement 2003

5.2 Roskilde Forsyning

At Roskilde Forsyning, it was the Manager of the Finance and Market Department, BJ, who initiated the entering the project on intellectual capital statements. Previously, he had talked to the Supply Manager, TC, about participation in the project and he thought it could be a splendid idea because as TC says

: ‘... we actually make a lot of well functioning things in our company – many different good initiatives on the employees’ part and with respect to the development of our values’.

‘We write different things about it all, but it just lies around in different files ... and it has always been a problem for us to have an overview of what it really is that we have of different things’.

The first Intellectual Capital Statement

The preparation of the document has however primarily lay with BJ for all three years (2002-2004) and the content of the document is to a large extent a summary of the initiatives which already exist in the company in advance and which have been decided at various management meetings as reflected by the following interview sequence:

BJ: We have discussed the intellectual capital statement at our management meetings. But what we also discussed at some point of time was that [the intellectual capital statement] is characterised by the things which are in progress in the department so it is also a collection of all the knowledge which is lying there. So the process has basically been good because now we have made the framework for the intellectual capital statement. What we need to fill into it was to take some of what we actually had lying around, I was about to say, in front of our noses – which was in the department in advance.

I: So many of e.g. the effort areas there are, they are some that you had talked about at other meetings?

BJ: Yes, the effort areas they actually stem from are our strategy meetings and our department goals. It happens that from 2003 there has been made specific department goals. Before 2003, those management contracts had been made where the department goals were included as a part of the management contracts, but again it has been specified in 2003 where we ourselves have a bigger, how shall I put it, description of the contracts.

... It is what our department managers have committed themselves to towards our manager. So that is what lays in the department goals. ... He [the manager] has then a further obligation towards what is called the executive board – in principle – that is the municipality of Roskilde. They have build up an executive board where a number of managers sit who kind of have the cross-responsibility that the activities of the municipality go in the direction suggested by the political framework.

The second and third Intellectual Capital Statements

The intellectual capital statement of 2003 has also been prepared by BJ, but if one takes a look at the content of the document, one will see that it has been extended in comparison to previous years. LH tells:

... He [BJ] has been able to put some of the other tasks aside [as LH has taken over some of the accounting tasks] so that he has had a little more space to work with it. There have also been some things which he has been able to use. It has all been tightened, you could say, with the measures which have been made. It has also something to do with what have taken place in the year and a lot took place in 2003 ...

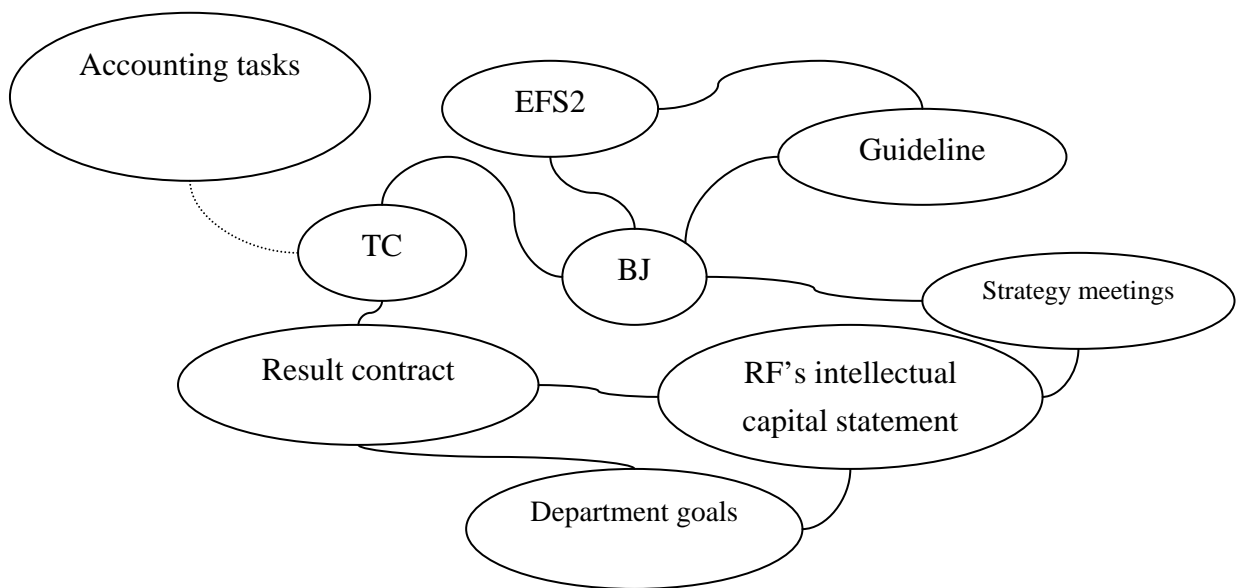


Figure 4: Actor network of Roskilde Forsyning's intellectual capital statement process

It is the initiating actor, BJ, who becomes aware of the IC-project and involves TC who summarises the many measures they already have, but also directs attention to the lack of overview which contributes to enhancing the idea of the need for an intellectual capital statement. BJ uses the guideline as point of departure, and in the very preparation he uses the management meetings to get input to the content of the intellectual capital statement, just as strategy meetings, the so-called performance contract (between the executive board and the manager) and the department goals (between the manager and department managers) are included as important actors in the build-up of the intellectual capital statement which gets a local importance as a collecting object for existing initiatives.

The pressure from other tasks also plays a role, and we see, that some of the accounting tasks are moved to LH which has the result that BJ gets more time to work with the intellectual capital statement which according to BJ 'has become somewhat of a fast-moving product'. Figure 4 illustrates this network as for Roskilde Forsyning only one network has been drawn because it has been very stable during all three years.

5.3 Frederiksberg Forsyning

At Frederiksberg Forsyning the primary reason why they participated in EFS2 was that the HR consultant (IV) found the project interesting in relation to her own work. It was at a seminar where the managing director (PK), the HR consultant (IV) and the customer manager (LT) participated, that they in Frederiksberg Forsyning became aware of the IC project. It was as the managing director (PK), through participation in a working group, under the Association of Danish Energy Companies about supply of courses in the utility sector was asked if Frederiksberg Forsyning to participate in the project on intellectual capital statements, then 'you feel a little obliged', tells PK.

The first Intellectual Capital Statement

The management has not demanded or participated in the very process around the preparation of the intellectual capital statement, but thought that it was fine that the HR consultant got experience with the subject through the project. VB tells:

VB: ... changes [were] on their way in the Danish Company Accounts Act (DCA) where there also were requirements for an intellectual capital statement and then IV said that she could participate in a development group and primarily the advantage to us could be that she gained some knowledge, there were some things we might get use of – also get some free competence. So that we at some point of time should make it and that IV in this way could get good experience relatively cheap and that she wished to do it, it had also something to do with the fact that she wished to do it, of course we said yes.

It is the HR consultant, IV, who has handled the preparation of the intellectual capital statement. She has, however, worked together with both the controller, a process consultant and the administrative manager, just as part of the material is taken from the company plans, tells IV (April 2002). In this way, she hopes that the intellectual capital statement 'will be realised'.

The next Intellectual Capital Statements?

The intellectual capital statement has had difficulties in gaining a more solid foothold in the company, IV had to acknowledge one year later.

IV (April 2003): The intellectual capital statement, it drowns, but I still use it a little bit as regards some of the things I found in relation to when we have a recruitment problem. We have not gotten to mapping of competencies. It worries the operations manager and me a little, and that is also for some reason why I stick to the intellectual capital statement.

However, IV says that the intellectual capital statement must be a more integrated part of the other systems so it becomes owned by people other than herself. This perception is shared by others in the company. MC says e.g. that the intellectual capital statement often has lived its own life which has not been expedient. However, it is a result of the fact that IV has been so 'buried in purely administrative tasks also which makes it difficult for her to take on a developing role ...'

That the process has partially come to a halt and that only one single intellectual capital statement has been prepared is not perceived by IV as bad, will, on part of the management or as an expression of the fact that they find it irrelevant, 'but they simply have not had time for it', tells IV. This interpretation is supported by several persons, for example by VB, CV and LT.

At Frederiksberg Forsyning, a seminar is the point of departure for the awareness of the IC-project, cf. figure 5. Several actors contribute to the enrolment of the HR consultant's participation in the project. Partly, PK is encouraged through his job in the trade organisation to participate – the coordinator of the group exchanging experiences from the trade organisation thereby enrolls the manager, PK, by appealing to his feeling of obligation. Partly, IV is interested in participating as it could give her a working tool. IV's manager, VB, supports her idea both because IV wishes to participate and because it could give some 'free competence'.

The spokesmen then begin to disappear and IV is left a little bit alone with the project. Therefore, she draws to a great extent on already existing measures which are found in the company plans that thereby became an important actor in the preparation of the first and only intellectual capital statement. The amount of administrative tasks and the struggle with other initiatives about the management's attention means that fact creation does not take place and the intellectual capital statement is pushed out on a side track.

To emphasise the strong relations of the other measures and administrative tasks, the lines are emphasised in the below-mentioned illustration of the network in figure 5. This shows how the attention is directed towards something else other than the intellectual capital statement. Other elements however live on, for example the knowledge which IV has obtained about the generational change among the employees and when the company may be expected to get a recruitment problem.

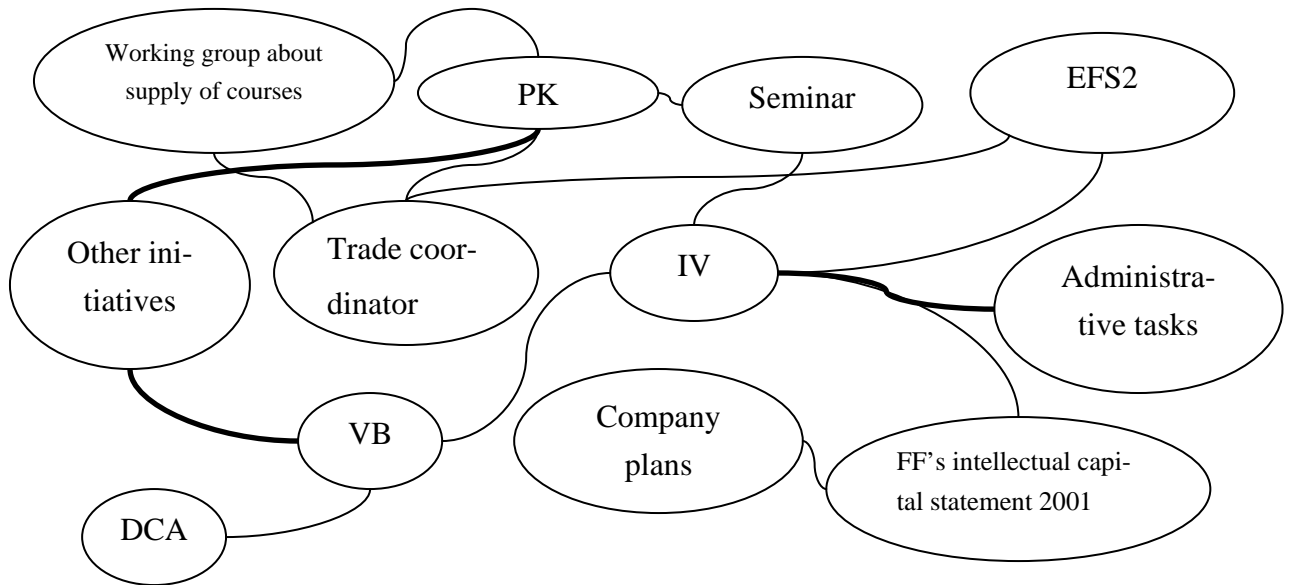


Figure 5: Actor network of Frederiksberg Forsyning's intellectual capital statement process 2001

6 Enactment of control

The practitioners in the three utility companies have not only initiated new organisational and management control initiatives. They have also embarked on initiatives directed towards controlling and reporting about the companies' knowledge management efforts. The intellectual capital statement has, as object potential to symbolise 'that knowledge is important' (cf. Mouritsen *et al.* 2001) and thereby show that a utility company now is more than utility. As it is suggested by Mouritsen *et al.* (2004) the intellectual capital statement can potentially be used to promote the public sector organisation as companies with their own strategies. Thereby, the IC statements become active in the construction of identities (Brunsson & Sahlin-Andersson, 2000). The intellectual capital statement becomes, in this way, enrolled as a part of changing the company from being purely about technical matters to also deal with strategy, customers and how one works to maintain the supply task in a responsible way in the future.

The intellectual capital statement is here, a concrete example of the fact that some practitioners in the companies try actively to counter the liberalisation of the sector and the Government initiatives towards more accountability of the companies with a new tool and get this development communicated to their own employees as well as politicians. Even though practitioners have problematised their local identity under the new market terms, it has not paralysed them – on the contrary they act. However, the intellectual capital statements have had different lives in the companies, as we saw in the previous section, and

their construction has also been initiated with many different purposes and actions in mind.

6.1 Forsyningsvirksomhederne Aalborg

At Forsyningsvirksomhederne Aalborg, the work with the intellectual capital statement was reasoned with the increasing demands from the external environment and the challenges this involves. In the introduction to the first intellectual capital statement, it is thus written that:

Forsyningsvirksomhederne, the administration experiences, like many other companies within the energy trade, increasing demands from the external environment about greater efficiency and more dynamism. Our current and coming employees at the same time demand an attractive working environment and the possibility of continued personal development.

These challenges require that we, to a greater extent are conscious about our knowledge management and make optimum use of our most important resource – knowledge. The administration has prepared this intellectual capital statement with a view to informing our stakeholders about what managerial measures we work with to live up to the expectations of the surroundings (Forsyningsvirksomhederne Aalborg, Intellectual Capital Statement p. 3)

The practitioners have several explanations of why the intellectual capital statement has become relevant as a new management tool. One reason emphasised by EH is that the vice-director had heard about the intellectual capital statement and found it interesting. As EH tells: ‘I think it was because [the vice-director] had participated in a course or process where he had heard about the intellectual capital statement and thought it was exciting and one must say that [the vice-director] he is a man who has the courage to start up something completely new.’

An important aspect is also that the role of the administration as ‘knowledge centre’ to the operational companies is being re-constructed. In this new role, the administration has, besides the daily administration the task of maintaining and updating (at the leading edge), the company’s overall strategic development with the development within the tasks of the administration such as e.g. accounting.

At the same time as the projects on developing IC statements were unfolding, according to the guideline there were also changes made in the Danish Company Accounts Act (DCA). As a new requirement companies included in the management report are required to give a description of the company’s knowledge resources if they are of importance to its future earnings. This means that e.g. the electricity supply must live up to the new demands on the management report. Certainly, the DCA does not require an actual intellectual capital statement, but on that day that the electricity supply or one of the other operational companies may wish to prepare an intellectual capital statement, the administration has, as a

gain of their own work with the intellectual capital statement obtained a certain expertise which the operational companies could make use of, tells JB.

August 2001 was the first time that an interview was carried out with Forsyningsvirksomhederne Aalborg and here it became clear that the intellectual capital statement was seen as a tool to develop the company, a development made necessary by the liberalisation of the electricity market. However, the companies were not completely inexperienced within dealing with intellectual capital. HC told that already in 1993 they had begun to take a look at what tasks lay ahead of for the following 2-3 years, and what profile the individual employee needed; but with the intellectual capital statement they hoped to get more structure on the education and recruitment of employees.

It was not however, only a question of the education of employees; it was also a decision of strategic character. HC tells: 'We have intentions to, at some point in time to also find out what kind of tasks we must maintain as core tasks that we need to keep making while other tasks ... which we probably will be conscious about and say: 'We do not need competencies for that – we buy that externally, end of story!'

The intellectual capital statement, as a project to the management group, was seen as a way of focusing internally as JN elaborates in the following:

JN: [the intellectual capital statement] is really more about getting focus on ourselves, and we have absolutely achieved that, because with all the schemes and processes etc. which we have gone through we have had to take yourself in hand and ask the question: 'Why are we actually doing this – what is the purpose of it – what should the yield be?' And I think it has been some really great processes we have had. When one looks at the intellectual capital statements as wholeness it expresses only a little corner of the whole big process which we have gone through.

The management group also uses the intellectual capital statement as a strategic tool to focus on the areas which the company wants to maintain, but the intellectual capital statement does not stand alone, it is, as JN tells, only a small part of the big change process which the company has gone through.

One effect of the process around the intellectual capital statement is that they have had greater interaction between the individual managers.

JN: ... it has created a little closer interaction between us managers than it has done so far. Previously I think that we each have mostly taken care of our own ducks nest and thought that that was the only one in the whole wide world. Those common projects also contribute to creating and maintaining a culture. They contribute to the fact that we also use each other in other connections and I can give the example that I have not had much to do with the technical secretariat before we moved over here, but as we have participated in those processes, we have also helped each other in other managerial connections. And another employee [TE] who is sitting out here as a part of [JS's] department, I have worked closely together with him in con-

nection with acquiring a new IT-system. So it does that one gets to know each other much better and also gets to use each other in other connections.

The employees in the individual offices are not involved in the intellectual capital statement, but gain knowledge of it, partly by the fact that it is distributed, partly by the fact that the employees are gathered in the canteen where the vice-director goes through the intellectual capital statement for them. It is however not something which according to JN has gained very much response.

6.2 Roskilde Forsyning

Roskilde Forsyning describes the background for preparing intellectual capital statements in the following way in the first intellectual capital statement that was published:

‘... focus [was] moved from the so far ‘rest in itself’ principle where plant and operation of the supply to a great extent was characterised by ‘best possible’ and thus seen under one, not always the most profitable pricing.

...

There has according to Danish legislation come an extreme focus on the consumption of resources for the supply of energy. It has of course had the effect on the supply area that we from an always ‘best possible’ must see more on the correlation in the demand and the necessary resources for supply of the required service and quality.

In this light, the intellectual capital statement is one of the management and financial control instruments which Roskilde Forsyning will make use of.’ (Intellectual Capital Statement, Roskilde Forsyning, 2002, p. 1).

The intellectual capital statement should be seen in relation to the development which also goes on in the company where contract based management has been implemented and more focus is directed to company plans. However, with the transition to the preparation of annual accounts and annual reports for parts of the company, BJ found it natural ‘to look to the intellectual capital statement’s idea about describing the whole around the company goals, knowledge resources, management focus and strategy of a continued existence in a new economy’. The new DCA here, also plays a role the decision.

However, it is not about control for the sake of control. It is about developing the employees so the company image is changed, tells JA in 2001:

JA: ... again it is also a question of making your company more efficient and we work very targeted towards changing the image of local government companies. We are determined to change this. Simple as that. And in this connection developing our employees is also a tool. That what you before looked askance at with the settlement, the local government pay level, it was perhaps not so good. We also do this targeted by saying that if we get some employees who can something extra, who are being educated, well then there is also a possibility of pay-

ing them for this. We also have the possibility of paying them via that we become more efficient as a company. Then there also becomes space for it in the system, so to speak.

At the operational level, it is also a question of competence recording and development, to gain 'control of what our people can, also with the development we are experiencing: Where are we heading, how do we register it so that it is easy to use ...', tells KH. This topic is especially relevant because the employees in the new organisation are going to work together in new groups, with a common manager who cannot in the same way have an overview of all employees as when they were small, decentralised units.

Another reason why competence registration is relevant is that the whole organisation is in the middle of a generational change and therefore they would like to 'where possible ... disseminate knowledge to as many employees as possible, also so that you are not dependent on individual persons' (KH). Specifically, they must 'describe how they are going to handle it when a person reports, that she wants to retire', continues KH. He also sees the intellectual capital statement as a part of the profiling when the company needs to attract new employees: 'It would here be an important matter to send out signals about what kind of workplace this is'.

6.3 Frederiksberg Forsyning

In the introduction to Frederiksberg Forsyning's intellectual capital statement 2001, the intellectual capital statement is motivated with consideration for knowledge management. It is e.g. stated that: 'In connection with the liberalisation of the electricity market, the work with knowledge sharing is an important factor to the company's development so that in the future we are better able to consider our customers' needs' (FF 2002, p. 2).

Several relations prevail in the considerations about the preparation of an intellectual capital statement. First of all, Roskilde Forsyning have integrated operational companies which before were spread geographically and therefore it is a question of getting a total overview of competencies within the company, believes MC. This argument is supported by LT who tells:

LT: To map knowledge, what is knowledge, to map the need for knowledge, and to make a plan of how to fill in the gap between these, I think, in general is interesting to any company. And especially, I think, in a phase where you are making some restructuring and some development, i.e. in connection with strategic development of the company, it is very important to find out what kind of knowledge is actually needed.

Secondly, in a few years there will, as in Roskilde Forsyning, come a generational change among the employees, tells IV. But the wish from the HR consultant about entering the project on intellectual capital statements is not only a question of clarifying the competencies which already exist with the employees, it is also an expectation that the intellectual

capital statement can be used to get the change process ‘under the skin’ of the employees. As IV here tells:

IV (Sep. 2001) ‘... It does cost some work because that understanding of a project organisation, it is incredibly strange and difficult to probably the main part of the employees here. So it requires, all that process work, to enhance that understanding and get it under the skin of people.’

The integration of the operational companies from independent hierarchies to a process and project-oriented organisation is not something that arises itself, neither practically nor mentally. Therefore, IV sees the intellectual capital statement as one of the tools in that process, but as it was documented in the previous section, the intellectual capital statement was not enrolled, and disappeared out of the change process.

6.4 The Intellectual Capital Statement

The intellectual capital statement has in its nature the ability to be both about control and about reporting or a kind of device for marketing the idea of the firm. We have in the previous sections taken a look at the management motives of the practitioners for working with the notion of the intellectual capital statement. In this section we will look closer at the intellectual capital statement as a part of the companies’ communication.

At **Forsyningsvirksomhederne Aalborg**, HC emphasises in the first interview as we talk about the purpose of the intellectual capital statement that it is not immediately seen as a tool for external disclosure. On the contrary, it is emphasised that the internal specification of initiatives must be instrumental in allocating the resources to the areas on which a company wants to raise its profile. Thereby, the intellectual capital statement is viewed as an internal rather than an external tool:

HC (August 2001): I am not aware that it must be visualisation of the company through, what’s it called, the intellectual capital statement, but by virtue of the use of the intellectual capital statement should contribute to visualising ... where one what should we say get specified: What kind of effort areas is it, what is it we want with this? And then sort of get allocated resources to the areas on which one wants to go out and raise ones profile.

Visualisation of the companies’ resources and competencies may be decisive in the future. JB points to another consideration which may lie behind the preparation of the intellectual capital statement, i.e. the talk about mergers which the electricity reform has resulted in. JB tells:

Some people still talk about that there are too many utility companies – they must merge. And the intellectual capital statement is also a tool to maybe making oneself attractive to a possible buyer. Is someone going to take over us?

... It is something that takes place round about. There are many companies around the country who have merged and then an intellectual capital statement could very well be an instrument, a tool to get an impression of the company which one perhaps would merge with.

HC uses the intellectual capital statement to give the Utility Committee an insight into the work which the administration does on behalf of the operational companies. The intellectual capital statement is not only distributed passively, HC also gives an oral account to the Committee, just as it is practice when the Committee is presented with the ordinary accounting statements. HC tells:

HC: I do not want to hide that I have abused it cruelly towards our new committee – it has simply gotten it thrown in the head – and at any given occasion referred to that there is it. And we are very conscious about here that a popular subject in always newly taken up committees is to say: “But the administration, what do they actually do? ... It is not anything else but ordinary fat which must be cut away”. But here they have gotten it served in such a way that now they can see a little bit about what it is that lies behind and I believe, know that we have thrown it out in this shape, then it is also something which they will read.

At **Roskilde Forsyning**, the supply manager TC actively uses the intellectual capital statement externally. TC could see a purpose of collecting the many initiatives ‘on part of the employees and on part of the values’, and there the intellectual capital statement was an opportunity of getting that overview. TC tells that he since has used ‘it primarily externally, i.e. up against the management in the municipality and towards the political level and of course also towards utility companies in other municipalities that they co-operate with’ (TC). The politicians are according to TC also excited about the intellectual capital statement:

TC: It gives them a good overview of what it really is we are doing out here because they hear so much about this supply department. Now they have done this and now they have done that. We are a pioneer department – you could say.

Internally, TC does not use it so much, ‘but it is documentation towards the employees of what it really is we have been working with all of us. We do not always remember it ourselves. You can also see that of the things which come to the light in the co-committees. They do neither remember all the things we are doing. You use it perhaps also in other respects where they say: “Why have we not done this and that?”. “We also have, dear friends, it says so in our intellectual capital statement, don’t you remember?”.’

At **Frederiksberg Forsyning**, they published the first intellectual capital statement, but it has not as such been included as an integrated part of the company’s communication and is primarily perceived as an internal tool by the HR consultant.

As seen from the three cases the intellectual capital statement is not only a means of external communication by the practitioners, but functions primarily as auto communication

(Christensen 1994) where the information actually is more directed towards the companies own employees and local politicians.

The supply manager at Roskilde Forsyning seems to be the practitioner who uses the intellectual capital statement mostly externally, but also the vice director of Forsyningsvirksomhederne Aalborg takes advantage of the opportunity, where the intellectual capital statement as Frederiksberg Forsyning is not seen as a part of the company's communication.

7 Conclusion

The supply companies were formerly local government units which handled tasks in relation to water, heat and electricity where the primary agenda was not profit or cost minimisation, but that the craftsmanship was in order. However, when new actors enter the network, e.g. in the form of new management tools, a negotiation of the relations takes place with the potential to change the network, i.e. if there is support for it, in the network.

The NPM literature (Hood 1991, 1995; Osborne & Gaebler 1992) places 'rationality at its core' (Lapsley & Pallot, 2000, p. 216) implying that decisions flow directly from an objective analysis of alternatives into actions. As many researchers, e.g. Olson *et al.* (1998) and Christensen *et al.* (2007) have emphasised, the implementation of the new management techniques is not as simple as it's supposed to be. This is also what the practitioners in the three case companies express. It is not only a question of how techniques developed in the private sector can be transferred instrumentally to a public sector company that basically works on other premises than the private sector.

The intellectual capital statements were initiated with different purposes and thus also created different rooms for action. At *Forsyningsvirksomhederne Aalborg*, the intellectual capital statement has been instrumental especially in bringing the focus onto the cooperation in the administration and together with the strategy process to enhance the effort in the core areas. The intellectual capital statement has contributed to enhancing the focus first of all on preparing educational plans for the employees, secondly on increasing the inter-disciplinary cooperation through project work and thirdly on documenting work processes. Thus practices have been re-considered in relation to the overall strategy of the firm, as the intellectual capital project finally merged with the more general strategy project.

At *Roskilde Forsyning*, which is a smaller company than *Forsyningsvirksomhederne Aalborg*, fewer people are involved in the administration and one single manager has prepared the intellectual capital statements. It is also distinctive that *Roskilde Forsyning* has primarily used the intellectual capital statement to gain an overview of the activities that were

already initiated and in that way ensure consistency and comprehensiveness. A third and different process has taken place at *Frederiksberg Forsyning* where it is primarily the HR area which the intellectual capital statement has been related to. Here, there are individual elements which the HR consultant can use in her future work, but the intellectual capital statement as an object has not had any consequences as to action.

This difference is likely to be due to differences in management's involvement in the project. In *Frederiksberg Forsyning* the IC statement did not gain momentum and the actors enrolled were not sufficiently powerful. This meant that other management concepts gained attention and the network around the IC statement was not stabilised as in the other two firms.

Research following the tradition of new institutional organisation theory (Meyer & Rowan 1977; DiMaggio & Powell 1983) has emphasised that the adoption of new management techniques and organisational forms may only be loosely coupled to the way organisations actually function since the adoption may reflect that organisations feel a need to demonstrate that they are using seemingly efficient control models. This does not appear to be the case in the three case companies. As can be seen from the materialisation of the intellectual capital statement in the three cases, it is however, very different things that take place when the idea arises in the companies and are translated into local practices.

Depending on the local context and the local actors, different network creations take place and the objects create room for different actions, depending on the importance they are attached. The networks are also an example of the struggle for attention, which exist between the different measures, and thus the 'struggle' a new measure must win to include and create strong relations. If this does not take place, the new measure such as the intellectual capital statement does not gain any importance and remains 'empty' and thereby does not create any opportunities for action.

The practitioner's accounts demonstrate that the number of initiatives which are initiated at the same time, especially, appear as a big challenge. The daily operational tasks must be solved anyway, and here it may also be difficult for managers as well as employees to keep pace. Activities and initiatives must be prioritised and all the companies struggle with the simultaneous implementation of a number of new management technologies, new politically determined challenges and issues that require attention.

In two of the companies - *Forsyningsvirksomhederne Aalborg* and *Roskilde Forsyning* – it makes sense to talk about an implementation of the intellectual capital statements as they at last arrive at a stabilised form where the relationships with other actors are reconciled and where the intellectual capital accounts take the form of a black box. Thus, the recipe of an IC statement is brought from idea to practice. But in the third company the IC state-

ment was in reality not even implemented in decoupled way; rather, it was rejected by the organisation (cf. Christensen *et al.* 2007, p. 71).

It is not a new observation that management support and involvement is decisive for the success of implementation projects as was also the case in the case companies. However, other factors did also play a role – and the enrolment of actors from outside the companies improved the likelihood that the intellectual capital statements become part of the stable networks in the companies.

7.1 What Can We Learn About Intellectual Capital Statements?

The three companies have all gone through many changes – and the transformation was not over at the time when we left the companies. In such a process, the intellectual capital statement does not have a privileged status. It is just one of many elements that can become important. We observed in the case companies how the intellectual capital statement by the practitioners is seen as a framework where it is possible to talk about a future *raison d'être*, where one can gather existing initiatives into a wholeness, and where effort such as employee- and competence development can be targeted depending on the different needs experienced by the practitioners in their everyday life.

There is not a 'best way' of working with the intellectual capital statement – again it is dependent on the specific local context. But it can, however, be concluded that an actor with a strong position is necessary for anything actually to 'take place'. As Latour (1987) argues, there must be a spokesman who can involve others for fact creation to take place. It is thus clear that in this process where the intellectual capital statement is up against strong actors such as benchmarking and the demand for reorganisation, the intellectual capital statement just becomes one among many actors that struggle for the attention for influence on the process.

If the intellectual capital statement is seen as a part of the company's total strategic work, it can be seen that the practitioners experience the notions and schemes of the intellectual capital statement as a suitable way of getting through a necessary process in which the company's strategy is determined. The intellectual capital statement can thus be used for enhancing company practice or, as Mouritsen *et al.* (2004) emphasise, even help introduce company practice if this does not already exist.

Even though the three companies have not primarily seen the intellectual capital statement as a disclosure instrument, there are still clear signs that the intellectual capital statement is used for communication. Not purely marketing related communication, but rather as a way in which they engage in dialogue with the important stakeholders about what the company practice is. Employees and local politicians are thus the ones who primarily are

oriented about the intellectual capital statement and its content. In this way, the intellectual capital statement can specifically be used to mark the utility company in a 'free' market as being more than just supply of public goods.

The intellectual capital statement shows that new competencies and initiatives are necessary and tells how a company acts in order to meet the challenges from the 'free' market. It is especially important for the companies to assure the employees that they are committed to this change and the intellectual capital statement can be a tool of communicating the way in which the change will take place. The intellectual capital statement is also a means of communicating in general to local politicians about the company's many measures to have the right competencies to handle the competition. Thereby, the companies try to maintain an acceptance of the fact that they are running the companies in a legitimate way and prevent the local politicians feeling tempted to sell or outsource the operation of the supply companies.

7.2 The Implications

To managers working with the intellectual capital statement or in the process of considering it, the implications of this study are that the intellectual capital statement creates opportunities as regards management and communication. And this is also relevant for public sector companies. The IC statement initiates discussions about the company's *raison d'être* and create opportunities for a greater consensus in the company about this and the coupling of actions to this.

Also as auto-communication, the intellectual capital statement seems relevant in relation to employees and the local politicians who contribute to the company's decisions. The intellectual capital statement can help communicate the company's strategic direction and a connection between the many initiatives. It may be used in the change process to create focus on and awareness about a number of the topics which are part of the companies' change.

The intellectual capital statement may thus be one among several elements in the change of the companies. However, if that is the case, it is as with all other things necessary that it is actually an initiative that is taken seriously. The intellectual capital statements did not become part of the management control activities, but they were not irrelevant in the prioritising of daily practise as the directed attention to the strategic issues. In the literature on intellectual capital statements it has been stressed that intellectual capital statement should be used as supplements to the traditional financial external reporting. However, this was not the case in these companies.

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¹ The interviewed persons at *Forsyningsvirksomhederne Aalborg* are: HC (vice-director), PS (store and purchase manager), JS (manager of the technical secretariat), TE (manager of IT-planning), EH (manager of the recruitment office), JN (manager of the customer centre), JB (manager of the finance office), GN (manager of the secretariat) and FJ (manager of the energy centre), at *Roskilde Forsyning* TC (supply manager), KH (operational manager), BJ (CFO), JA (department engineer), LH (accounts officer) as well as at *Frederiksberg Forsyning*: PK (manager), IV (HR consultant), CV (process consultant), MK (controller), VB (administration manager), LT (customer and communication manager)