

Flexible retailing

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Abstract

This paper examines how flexibility is achieved and is based on a case study on a department at a retail store in Sweden by investigating their process of planning staffing needs. The studied firm schedules in one-year periods putting a lot of faith in the process of producing a schedule that meets the customer fluctuations. Therefore, this study has followed the process of which customers' and employees' interests undergoes a number of translations. As a result, this paper suggests that the firm manages to achieve responsiveness of internal and external relationships. This paper critically examines traditional flexibility theories for implying that insecure employments are a prerequisite for achieving flexibility. The studied company primarily uses permanent employments and instead manages to achieve flexibility through an extensive scheduling process. In this sense, showing that flexibility is achieved as a result of a process rather than a capacity a firm has, or can have.

Keywords: flexibility, the flexible firm, retail, actor-network theory, staffing

1. Introduction

The business environment and market conditions are characterized with economic and technological changes with increased competition resulting in a situation where organizations need to have greater flexibility in their employment systems (Kalleberg, 2001). In particular, firms are pressured to find more flexible ways of manning to adapt to the new market realities to achieve a workforce that can respond quickly to unforeseen changes (Atkinson, 1984). During the 1990s an overall change in employment practices has occurred, decreasing the use of full-time and permanent employments and increasing the use of part-time and temporary employments (Bergström, 2001; Tullberg, Walter, Blomquist, 2014).

A lot of research has been done on what implication this has on organizational level; how to best organize in order to be flexible. Such strategies are based on the idea to either enhance employees' ability to perform a variety of tasks involving them into the organization, or to reduce involvement by the employees and in this sense create a looser connection to make it easier to get rid of them if necessary. Researchers have labelled these strategies differently but they circulate around the same idea. Atkinson (1984), Smith (1997) and Hunter et al (1993) defines it as the combination of

'functional and numerical flexibility', Cappelli and Neumark (2001) as 'internal and external flexibility', Colclough and Tolbert (1992) and Deyo (1997) as 'dynamic and static flexibility', and Tsui et al (1995) as 'organization-focused or job-focused employment relations'. Furthermore, there has also been research focusing what implications these new employment practices has on individual level. Such employment relationships have drastic consequences for employees' well-being and job security (Sennet 1998) and the individualization of work is a new 'age of insecurity' (Doogan, 2001). This 'jobless economy' (Coyle, 1998) makes people feel insecure as a result of the reorganization of employment systems. Sarantinos (2007) criticizes the models on organizational level described above since it causes negative effects on employees working under such organizations circumstances. The reason for this is that a focus on workforce that is loosely connected to the organization leads to alienation of employees who lose their commitment to the firm, creating long-term disadvantages.

One of the most influential researcher on flexibility is Atkinson (1984) who presented the core & peripheral model, also called the 'flexible firm', which has been widely discussed ever since. The model presents how firms should balance 'functional flexibility and numerical flexibility' in order to meet the customer fluctuations. Functional flexibility is defined as "employees can be redeployed quickly and smoothly between activities and tasks"(1984:3), meaning that the firm has multi-skilled employees to change tasks within the organization depending on specific need. The numerical flexibility is defined as "...headcount can be quickly and easily increased or decreased in line with even short term changes in the level of demand for labour. It might mean that hire and fire policies can be more easily implemented, or that hiring gives way to a looser contractual relationship between manager and worker. The end result would be that at any time the number employed/working exactly matched the number needed." (Atkinson 1984:3). Workers in the core group, representing the functional flexibility, are full-time permanently employed and the peripheral group, representing the numerical flexibility, are part-time 'on demand' workers. As a result, the firm is flexible if it manages to achieve a combination of functional and numerical flexibility (Atkinson, 1984).

To achieve flexibility Atkinson, in line with the arguments provided by the other research on organizational level described above, state: "For these employers, a change in the organization of work is seen as the best way of achieving greater flexibility from the workforce" (1984:4). What all of the research above has in common in that they discuss the 'flexible firm' and what strategies firms can use to be flexible. In other words, seeing flexibility as a capacity a firm has or can have. Furthermore, it assumes that in order for firms to be flexible, they should use various forms of temporary employment or temporary help agencies.

This paper problematizes the 'flexible firm' presented by Atkinson (1984) as it takes many assumptions for granted and does not really show how flexibility is achieved in

practice. First, it assumes that the firm knows exactly when the customer fluctuations will occur and in this sense when the customers will come. Second, that the firm has access to people, who are willing to work under such circumstances. Third, that when customers come to the organization, the employer can call someone who then manages to come directly to meet the increased customers demand. Thus, it assumes that flexibility is actually achieved within the firm, without really describing how the firm knows what external factors, the customer fluctuations, to organize for. This is problematic since it takes for granted how the internal and external interacts.

This thesis aims to create better understanding of how flexibility, in terms of staffing, is achieved in practice and to answer the research question: *How is flexibility achieved within a firm?* Since the retail industry is characterized with large customer fluctuation that sometimes is hard to foresee it is interesting to investigate in terms achieving flexibility (Tullberg, Walter, Blomquist, 2014). Therefore, this thesis will be studying a department at Swedish firm in the retail industry attempting to achieve flexibility through planning. The process of producing the schedule takes several months including managers, Human Resource personnel and management team working actively to forecast customers demand and organize their employees to match that forecast. This case is especially interesting since the studied firm has mainly permanent employees and hence very few working on demand. Flexibility in this study refers to a firm's ability to match the customer fluctuations with the level of employees in a firm.

This thesis is written from an Actor-Network Theory (ANT) perspective. By analyzing how actors' interests are translated and power relationships are structured (Callon, 1986) I will argue that flexibility is a result of a scheduling process that manage to match the interests of employees and customers. Lee & Hassard (1999) argue that ANT is well suited for investigating contemporary developments in organizational practice. They argue that due to increased uncertainty and fast moving economic conditions clear organizational boundaries is not to be treated as shorthand for success. Rather, they explain, that responsiveness to market is critical and it "... is sought by maximizing the flexibility of organizations' internal and external relationships" (1999:394). The question still remains, how is this flexibility of internal and external relationships achieved in practice? Lee & Hassard say the ANT creates a 'blankness' that provides an "unwillingness to decide the shape of the work on behalf of the domains it examines" (1999: 402). With this 'blank' approach ANT can provide another perspective removing the boundaries described in the 'flexible firm' in order to investigate the processes of achieving flexibility.

The study is delimited to only investigate one department within the retail store because of time limitations. Although the scheduling process is used in all the departments at the store a greater focus can be put on the one department that has been studied. Furthermore, due to time limitations, the entire process was not followed. However, the empirical data was gather during the most active part of the

scheduling process and insights of the steps before and after was collected through interviews.

The thesis is divided into the following sections: First, a theoretical framework of actor-network theory will be presented. Second, methodology of the study is provided. Third, an overview of the setting and case description will be presented by describing the scheduling process studied. Forth, there will be a discussion on how flexibility is achieved. Lastly, conclusion and implications will be discussed.

2. Actor-network theory

Actor-network theory describes how the world consists of networks of actors. These networks are created by a number of actants: something that acts or is acted upon within a specific context (Greimas & Courtés, 1995). Actants that end up playing a meaningful role in its context becomes actors. Hence, it is the formation and stabilization of actants that becomes actor-networks. The networks are in this sense constructed through a number of translations (Czarniawska & Hernes 2005). Callon (1999) describes that translation is the movement of different forms of knowledge, cultural practices, technology and artifacts. In this sense, the actor networks include both human and non-human actors. The non-human actors can take any form and could be referred to as artifacts (Latour, 1993) or “devices, texts, ‘decisions’, organizations, and interorganizational relations” (Law 1994:23). Furthermore, the actor is always dependent on the context. In this sense, an idea, an object or an action is translated into the local context through materializing into new ideas and so on (Czarniawska & Joerges 1996). As an idea travels and is translated, it can be described as it is the actors’ interests that is going through the translations (Callon, 1982). In the process of translation the different actors’ interests are constantly negotiated and taking different forms (Callon, 1982). Since ANT always is affected by the context in which the actors are involved, its focus lies in tracing networks of actors and how they are connected. Conducting a study using ANT means that nothing is predetermined of how actors are connected to each other and they affect each other (Latour, 2005).

For this thesis, non-human actors playing a critical role are inscriptions. Inscriptions are materialized forms of actors and can take different forms, such as a paper-copied report, e-mail or Excel file to name a few. Latour (1988/1990) exemplifies the advantage of creating inscriptions with a photography of the sun. By using a photography it (the sun) becomes moveable, can be modified in scale, reproduced at low cost and become part of a text. In this way, information or statistics regarding the customers’ interests can be summarized in an inscription instead of physically bringing the customers in person.

Actor-networks consist of micro actors, with lesser importance, and macro actors, with greater importance. A macro actor is very powerful and its actions are seldom questioned and therefore often taken for granted. In this sense, the act of a macro

actor can be described as a black box (Callon & Latour 1981). In organizational contexts, black boxes are often referred to as truths, facts, or habits that seldom is questioned. Macro actors represent a number of other actors but with their own voice. With this reasoning, power is a result of network of actors represented through a macro actor (Latour 1998b). Traditional theories see power as the cause of events and actions whereas ANT sees it as the effect or result (Czarniawska & Hernes, 2005). ANT's view on power originates from Foucault's (1984) idea that that power cannot be in the possession of some people to dominate and constrain others, but that it is relational and productive. Latour (2012) express the traditional view of power as the diffusion module and the ANT's view of power as the translation module.

To follow objects, and put focus on the humblest of actants, can discover new perspectives otherwise hidden in black boxes. To shadow people reveals more about their actions than about their networks. Hence, "following objects diminishes the risk of focusing merely on people and neglecting other actants present in every network" (Czarniawska, 2014:64). Latour (1998b) furthermore argues that we are never confronted by only one actor, but rather a whole chain of actors, which can be discovered when following objects.

As discussed by Lee & Hassard (1999) in the introduction, ANT can be used to describe how organizational boundaries can no longer be shorthand for success. Lee & Hassard (1999) argues that ANT is well suited for investigating contemporary developments in organizational practice. They explain that ANT is ontologically relativistic and therefore have no predefined way of how the world shall be organized, but also empirically realistic since it produces descriptions of organizational processes (1999). As ANT also includes non-humans as organizational participants, it creates a 'blankness' and provides an "unwillingness to decide the shape of the work on behalf of the domains it examines" (1999:402). With this 'blank' approach ANT can provide another perspective removing the boundaries described in the 'flexible firm' in order to investigate the processes of achieving flexibility.

When using ANT I am still aware of the critique against it suggested by Whittle and Spicer (2008). They argue, "ANT relies on a naturalizing ontology, an un-reflexive epistemology and a performative politics." (2008:612) Although they do not neglect that ANT provides a valuable framework for empirical analysis of organizational processes they say that it does not provide a critical amount of organization. However, as Latour (2005) points out, ANT strengths lie in its call for close empirical study of associations and that ANT can "describe the state of affairs at hand" (Latour, 2005:144). Therefore for this thesis, to understand how flexibility is achieved, the entire process needs to be followed to see how the internal and the external factors interact and plays a part of achieving flexibility. I will show how the studied company works to remove the boundaries between internal and external by trying to forecast the external demands, customer fluctuations and match it with the internal organization. To understand this, the process of producing the schedule for next year

will be described where the different actors interests are translated through a chain of translations.

3. Methodology

To trace how the customers and employees are translated and used in the scheduling process a qualitative method has been used. The strength in qualitative studies is its underlying ability to really dig deep into people's meanings and in this sense understands *how* they see a specific social phenomena and how that affects *what* they do in practice (Silverman, 2011).

The starting point of the data collection was to gain understanding of the context of the department including its operations in order to collect information regarding an planned change processes by the management. In particular by investigating what role the staffing schedule played in the daily operations on the department at the studied firm. To understand the staffing schedule's role, interviews were conducted with employees, supervisor and managers. Furthermore, observations were made in the departments daily operation and meetings that had something to do with the schedule.

To analyse the material, grounded theory techniques were used and in this sense made it possible to use data from a number of different sources (Martin & Turner, 1986). The idea is to categories the data from the different sources into general patterns that give insights in the given topic (Martin & Turner 1986; Silverman, 2011). Thus, all the transcribed interviews as well as notes from observations and meetings were all categorized into different themes. In the beginning of the data collection a wide range of themes were found: Communication, workload, working environment, customers, scheduling, leadership, work tasks, responsibility and trainings to give some examples. However, as it progressed a pattern appeared in the categorizations: a lot of the data focused on how the schedule works, communication relating the schedule, and above all, notions of the process of producing the schedule. To start with a broad variety of themes is part of the process leading to knowledge and awareness of conditions of the studied case as the focus becomes narrower (Martin & Turner, 1986; Czarniawska, 2014). It became evident that flexibility connected to the schedule was not primarily related to how it was used in the daily operation but rather how it was produced. It became clear that the production process of the schedule played a critical role in the department's ability to meet customer fluctuations.

The data collection continued with a focus on the producing of the staffing schedule. For that to be possible proper access in the firm's everyday work was needed. In particular, I needed to be there when the actual planning occurred. Therefore, it was crucial to get hold of the right people involved in the different steps of the process as well as being able to attend at the meetings whereas the questions was discussed. In practice, this meant to participate during meetings with Human resourse personnel, managers and other persons involved or affected by the scheduling. In that sense,

first-hand information was collected on the scheduling process by being present when the actual planning happened, this was also complemented with interviews to dig deeper into specific areas. Because of limitations in time for this paper a complete longitudinal design was not possible. However, I was able to be present during two critical months when most persons were involved. To be able to map the entire process I used interviews to gain insight into the steps that come before and after the period I could be present for. In total 20 interviews were conducted with an average time of one hour in length (see table 1 for more information). Furthermore, 3 days of observations during their daily operations as well as participating at 8 meetings concerning the scheduling processes were attended.

<i>Category</i>	<i># of interviews</i>
Employees	13
Human Resource Specialist	2
Managers	5
Total	20

The majority of the collected field material comes from qualitative interviews. An interview as Silverman (2011) puts it, shares the involvement of moral realities as any conversation, which offers data of people’s accounts of their daily activities. Or as Czarniawska (2014) puts it, the data in interviews are often *narratives* of how the interviewee accounts the world. This, however, should not be seen as a problem since the told narratives most likely is the account for on what grounds the interviewee make its actions in real life as well (Czarniawska, 2014). In this paper, different persons describe what they do in the scheduling process, including what information they collect and gives to the next person involved in the process. Using the insights that was gained in one interview as input I then shadowed the information that person passed on to the next person involved in the process to see what the receiver of the information said and did with it. In this sense, narratives of how the information, or the object, is translated between different actors was received. In this case, observations during meetings in the process of producing the schedule has given insight in what roles the different actors play in different parts of the process. All conducted interviews has been recorded and transcribed within three days to gain as accurate notes as possible (Czarniawska, 2014). Notes were still taken during the interviews to come back to specific questions that needed elaboration and to have keynotes in case of technical trouble with the recordings. During the observations of the daily operations and meetings notes were taken into a notebook and questions or situations that needed elaboration were highlighted, and these questions were asked to the people involved afterwards in privacy. Hence, notes were collected from both interviews and observations in order to use grounded theory (Martin & Turner, 1986).

The study was conducted from an Actor-Network Theory perspective. The reason for using ANT was to follow the processes of producing a staffing schedule including not only humans but also objects and other nonhuman actors part in this process. When following a processes and watching how different actors move through networks one can discover new nonhuman actors that otherwise would not gain attention, which otherwise might be taken for granted, so called black boxes. Hence, to follow objects instead of only humans offers a possibility of looking beyond people and their power relations (Czarniawska, 2014). With this method this study gives insights in how Excel documents, paper forms, the weather, work law and other nonhuman actors play a critical role in the producing of staff schedules. Furthermore, by following different actors it was investigated how their interest unfolded in the translation process and how it contributed to achieving flexibility.

To get a proper overview of how the process of producing the schedule looked like I started out mapping the entire process. This will be described in the following section.

4. Case Description - The scheduling process

In the following section, the different steps in the process will be outlined where the customers and employees interests are translated and then merged together into the finished schedule. It will be discussed how different actors, both human and nonhuman, play critical roles in the department's search for achieving flexibility by analyzing them in terms of actors, macro actors, inscriptions, and black boxes. Furthermore it will be discussed how the different interests of customers, employees, and managers are heard and prioritized in the different steps of the process. These terms can be used in many ways but has helped to describe a complex process where networks of actors are translated in search to achieve flexibility.

4.1 Setting

The studied firm is a Swedish owned, globally operating retail firm. The case study took place in a store located in Gothenburg, Sweden. The store sells consumers products for the home and has thousands of customers visiting each day.

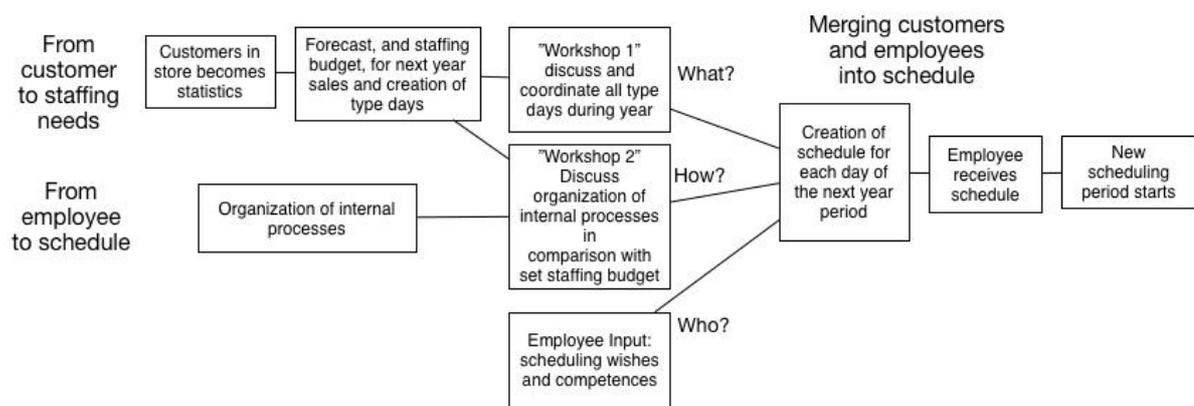
The studied department is divided into two smaller sub-departments (in the rest of the paper the 'department' refers to the entire department and not the sub-departments). The first sub-departments main focus is to operate all the cash desks for new products and the other sub-department operates all repurchasing for customers wanting to return or change products. However, the second sub-department also operates additional customer services functions such as special product delivery for large products in store and home delivery of products. The studied department has about 80 employees including one head of department manager, two department managers, and two group managers. Furthermore, There are four supervisors responsible for the daily operations but they do not have any staff responsibilities. The majority of the employees are permanently employed with contracts ranging from full-time to part-time (working as little as every other weekend), although there are still a number of employees working 'on demand' without specified hours in their contracts. As many

employees are working part-time while undertaking full-time studies, they are pleased with having part-time employments. In the daily operations the department has between 10 and 25 employees working. The department operates between three and eight regular cash desks and one to four repurchasing cash desks to cope with the customer pressure. The department struggles with the challenge of having a balanced staffing level to be able to handle the customers in a good way while at the same time not overstaffing to keep a slimmed personnel budget.

4.2 The yearly scheduling process

The process of producing the schedule can be summarized by the flowchart:

Scheduling Process Overview



The process is divided into three large parts. The first part, *From customer to staffing needs*, begins by customers walking in to the retail store. The customers are then turned into statistics of different forms that is used to create a forecast on next year's sales, which is also the base for the staffing budget. The forecast is categorized into different 'type days' that illustrate the amount of customers forecasted to come each day of the year. The second part, *From employee to schedule*, is a process running parallel with the first part and it starts with the employees. Employees give input of their wishes and competencies for the next years schedule period. Furthermore, it is decided how the department will be organized in order to be prepared to match staffing level with the customer fluctuations illustrated in the 'type days'. The third part, *Merging customers and employees into schedule*, means that the input coming from the first and second part is merged together as the actual schedule is produced. The schedule is lastly handed out to the employees and couple of weeks later the new scheduling period starts.

4.3 Interests

As presented in the overview of the scheduling process above the two main groups, customers and employees, have different interests that are taken into consideration.

When the customers arrive at the department its either to pay for their products or to make an repurchase. Either way, they wish to spend as little time possible waiting in

queues to get their errand done. The employees explain that the customers are used to wait a short while, but if the queues become too long, they will complain to the cashier. However it is hard to say a specific length of queue accepted by the customer and it varies between weekdays and weekend. During weekdays, when it usually is lower customer pressure and hence lower staffing, the customer usually complains relatively fast and asks the employees to open more cash desks. As a contrast, during weekends, if the customer sees that all cash desks are open they tend to accept longer queues since they know that the employees cannot open another cash desk. Furthermore, the customers want to feel welcome and be greeted by an employee with a good attitude. In sum, the customer has an interest in making their errand as smooth as possible and the same time meeting service-minded employees.

The employees say that their working environment is greatly affected by the level of staffing. Many of them say that the department is understaffed too often and that it leads to long waiting queues for the customers. The long queues create a pressure on the employees feeling that they have to work faster, which creates stress. The wanted scenario, the employees explain, is when they have enough time to meet each customer, have a small chat with them, maybe make a little joke and in this way create a pleasant experience for the customer. When the department, for some reason, is overstaffed the employees enjoy working in a calmer tempo than usual. In short, the employees have an interest in never being understaffed to have a pleasant working environment.

However, as the department has a limited budget, which is set by the management team in the store, its interest also takes part in the process. It is also in its interest have pleased customers and employees, but to the lowest possible cost.

The interests described here comes from the employees' own words of what is important for them. In regards of the customers, it comes from the employees interpretations of what the customers consider important. However, these interests will go through many translations before they are visualized in the schedule. In the next section a more detailed description will follow of how the customers starts out as customer moving within the store that are translated into different forms to end up being a number representing the department staffing needs.

4.4 From customer to staffing needs

Customers in store

The customers come to the stores with different agendas. Some have a predetermined agenda to buy specific products, some come without predetermined buying lists and some go to the store to eat in the restaurant located within the store. The customers that end up buying products can go to either a regular cash desk or a self-service cash desk. The customers queue until it is their time and then the cashier greets them. In the self-service cash desk one cashier operates four cash desks where customers can scan their products on their own. When a cash desk is empty the cashier directs the

queuing customer to that cash desk. If any question arises, the cashier is there to answer these and potentially give support to the customer paying automatically using a card terminal. Then, the customer packs its products in bags and then leaves the cash desk. The payment is registered in the cash register. All the registrations are summed up each day showing daily sales, number of purchasing customers as well as an averaged receipts value in the firm's internal statistics system.

Each day the supervisor maps the customer queues. The supervisor has a paper form that is filled in each hour during the day counting how many cash desks are open as well as an average number of customers queuing in each queue. Sometimes the supervisor has no time to fill in the numbers at each given time in the form, but tries to remember afterwards how the situation looked liked and writes that down. When the form is filled in the supervisor goes to a computer and transfers the statistics from the paper to an Excel document using a computer. Using the Excel document an analysis can be made on how long the queues are at different times of the day as well as an analysis of how well the department manages to match their staffing in the cash desks compared to the customers coming.

Meeting business drivers for department

In the beginning of the scheduling process the finance department and the head of the department have a meeting discussing what 'business drivers' they will measure in their historical data to base the forecast of next year's sales on. Firstly: number of paying customers is measured based on number of transactions from the cash register. Second, number of errands in the repurchasing section based on the total number of receipts. This is explained to be problematic since all errands do not generate receipts resulting in deviation from the reality. The third business driver is number of in-store products delivered from the repurchasing section of the department measured by number of errands in from the logistic department collecting these products. All the statistics to measure these 'business drivers' are later collected by the finance department in order to get an overview of possible increase or decrease of capacity needed at the department.

Estimating next year' sales

The stores total staffing budget is dependent on the total forecasted sales for the coming year. The head of department together with the sales manager and finance department in the store are responsible to calculate it. The forecast is based on the formula:

number of visiting customers conversion rate average receipt = total sales

The number of visiting customers is based on how large market area the store has. Depending on the size of share of customers each store has in the different districts they are allocated to the different stores. Furthermore, the forecast includes the flow of new residents to the city area creating a possible new customer base.

The conversion rate refers to the rate of which visiting customers actually become paying customers. To get information about how many customers that visit the store cameras with automatic counting function are used. The cameras are placed at strategic locations, such as entrance and exit, to calculate the amount of people coming in and going out of the store. The cameras automatically registers the number of people passing by. In this way, information about how many people that passes through the store each day is collected. However, since the visitors might walk past the cameras more than once the cameras are unable to count the number of unique visitors for a specific day. Thus, it is impossible to know how many times each unique visitor has been registered and therefore also exactly how many unique visitors the store actually has each day, and in total of one year. Furthermore, the cameras have shown historically to not be fully accurate and sometimes not trustworthy. However, it is seen as a practical and cost-efficient way of collecting data of the customers since there are no personnel costs involved. In the end, the cameras provide a total number of visiting customers.

This is then put in relation to how many customers that ended up buying something, information that comes from the payments in the cash registers, in turn showing the conversion rate. Lastly, the average receipt is taken from last three years' sales. If the store has any specific focuses during the coming year, on either relatively lower or higher price levels such as beds or kitchens, this is also taken into consideration. In particular, sales statistics are taken from the cash registers from the last three years and inserted into an Excel document. In the document, the values from the last three years are weighted to gain an average number to show a sum as close as possible to the reality. In the end this stage ends up reaching a 'qualified guess' of what the total sales will be next year. Furthermore, based on the total sales a budget for staffing hours is calculated.

Categorization to 'type days'

When the yearly forecast for the entire store is set, the finance department adds two more dimensions to the forecast document. First, how the total staffing budget will be divided between the different departments in the store. Second, each day of the coming year is divided into different 'type days'. The 'type days' show the total customer pressure at each day and in what time pattern during the day the customers visit the store. The information regarding what time the customer arrives is based on time studies on historical data showing when the payments are done in combination with the statistical data gathered regarding the customer queues. In this way, if there are certain time periods that there are longer queues, one can discover that the department has been understaffed during those times and adjust it to next year's categorizations regarding 'type days'.

Usually there are fewer customers on weekdays, with an increase during Friday and most customers coming to the store during weekends. There are other factors explaining the fluctuations in customer pressure. Usually increase in number of

customers in the end of the month, when most of the Swedish people receive their monthly salary. Important holidays are also taken into consideration. Likewise, if the weather is rainy or cloudy then it is more likely for more customers to come to the store than if it is sunny. The 'type days' are divided upon Monday, Tuesday to Thursday, Friday, and Saturday to Sunday. Hence, Tuesday, Wednesday and Thursday are all considered to have the similar customer pattern and therefore have the same 'type day'. Likewise, all days are given a certain level of customer pressure divided into seven different levels such as weak, normal, strong and peak. The decision of how to divide the 'type days' is taken by the finance department. However, there are recommendations from the national organisation providing support of how to do it. For example, 0-1000 customers a day becomes a 'weak' day, 1000-2000 customers comes a 'normal' day and so forth. Hence, the end product of this step is that each given day of the year receives a type such as weak Tuesday-Thursday, Normal Friday or Peak Weekend.

'Workshop 1' - Coordinating 'type days'

The forecast brought forward from the finance department is discussed during 'Workshop 1' including participants from the finance department, the HR department and the management team of the store. The management team consists of each head of department of the store. During the workshop the participants discuss the year to come in order to coordinate all the departments in the store to have a united preparation for the customers. For example, to make sure that if the sales department will have high personnel count at a specific day then the cash register department must be prepared to cope with a higher customer pressure. Furthermore, the participants discuss the next year in terms of public holidays and other diverging days or periods that are likely to affect the amount of customers. The aim of the discussion is to make sure that all departments agree about the decided 'type days' set for each day the coming year. This in turn enables all different departments to later adjust their staffing budget to each 'type day'. After the workshop the human resource personnel meets with the head of the department to discuss the outcome of the workshop and to make sure that their input has been given to the rest of the management team. Furthermore, a clear picture of how many customers the department is expected to handle each day for the coming year and how many staffing hours they have to handle is decided.

4.5 From employee to schedule

In a parallel process happening during the same time period as the customers process described above, the employees' interests go through different stages. The next section will describe how the employees are translated into different forms to ultimately end up as numbers in the schedule.

Human Resource personnel give instructions to department managers

The human resource personnel have a meeting together with the two department managers. The HR-personnel asks the managers to decide how to organize the

processes of their departments. To guide them the HR-personnel also provides a Excel document to fill in. In the document there are different workstations to fill in, for example cash register 1, cash register 2, repurchasing register 1, and so on. The managers' task then is to decide how many cash registers that need to be open on each of the 'type days'. In this stage, the managers fill in the Excel file based on how many employees they need, not considering the forecast brought forward from 'workshop 1'. They decide when next meeting will be for the managers to present their 'type days' planning for the HR personnel.

Individual employee wishes

In order for the Human Resource personnel to insert the individual employees into the schedule certain information is needed. In particular there are two types of information that the managers need to give input on regarding their employees; competencies and working time wishes.

A couple of weeks before each scheduling the managers hand out papers for the employees to fill in and give back. The employee can then fill in the specific times where the employee wishes not to work, for example Tuesday evenings since the children have got sports practice. The manager, however, emphasizes that the input should be seen as wishes rather than demands and that the input will be taken into consideration but is not promised. The manager later receives the paper from the employees and summarizes it in an Excel document. The document is handed over and explained during a meeting where the HR-personnel and manager discuss the wishes of the employees. If any wishes are considered unrealistic, for example an employee wanting to avoid working on Fridays, then the manager needs to discuss this with the employee. Otherwise, the employees will have the wrong expectations and be disappointed when receiving the schedule later on.

The managers also provide information regarding competencies to the Human resource personnel. The competencies illustrate the training needed to work at the different workstations in the department. All employees have the basics competencies enabling them to operate the cash desks, as well as a greeter role welcoming the customers arriving to the store. However, there are other workstations such as repurchasing, transportation and a back office customer support, although more extensive training is required before being assigned there. Information regarding what competencies each employee have and want to have is discussed during the individual employee's goal and development meeting that is held each year. Furthermore, the employees sometimes approach the managers informally informing them that they want to learn a new competence. The two managers described the competence mapping in different ways. One explained that if an employee told him that he/she wanted to learn a new competence then they tried to plan the training as soon as possible. The other manager, however, stated that it is the competencies demands of the entire department that decides how many employees will be trained. After the

total demands is set, hence when the schedule is done, some employees are given the opportunity to attend trainings to acquire new competencies.

The employees all show individual demands regarding their competencies. Some say that they are pleased with only operating the basic competencies and enjoy a more routinized workday while others express that they like moving between different workstations and therefore wishes to have as many competencies as possible. Therefore, the ability of the managers to forward the right wishes of the employees to the human resource personnel is of great importance for the relationships with their employees. If they succeed the employees will be pleased with their schedule for the next years period, and if they do not, an irritation can arise towards the managers for not paying attention to the wishes of the employee.

Personnel allocation in department per 'type day'

Before the managers can fill in the Excel documents received by human resource personnel they investigate how they want to staff the processes and workstations at their departments. Since both of the managers recently started working on the department, they spent extra time on trying to get deeper understanding about all processes in the department, as compared the previous managers working there for a couple of years who organized based on their experience.

One aspect is the experience of working in the department, where the managers have their personal experiences to relate to but also tries to collect experiences from their employees. The managers explained that they received complaints from some employees about being understaffed in certain processes, such as the repurchasing and back office customer support. Furthermore, the manager listens to what the employees says during their goal and development plan-meetings, but also try to *read between the lines* of what the employees actually say. One example is that one of the managers heard that many employees spoke of Mondays as problematic in the repurchasing department. Therefore, the manager decided to take a closer look at the statistics specifically for Mondays. It was found that the workload on the processes involved in the repurchasing department has increased, resulting in difficulties in coping with the customer pressure. Previous years, the 'type day' was combined Mondays to Thursdays. However, since Mondays showed to be more workload in the repurchasing department, the 'type day' did not match the actual demand for staff. The manager therefore proposed to have a specific 'type day' for Mondays.

General statistics about the department was also collected. The manager used the store's business system to gather information about the processes in the department. The manager looked at historical data of number of errands and average time on the errands for the six different processes present in this department. Examples of the processes can be errands of repurchasing, home delivery services and so on. In this way, the manager calculates the total amount of time spent in the different processes. Furthermore, except for the processes, the managers make an estimation of how many

hours of fixed time should be spent on trainings for the next year. The estimation is based on the number of personnel in the department combined with the historical personnel turnover to get an idea of how many new employees are likely to be recruited in need for trainings. Here, the manager sums up the forecasted time needed to staff all these processes and trainings for the next year in an Excel document. Now the manager has a chance to compare the time spent on each process to the goals set by the national organisation. In this case, many of the process times were not within the set goals. The manager also calculated a scenario of how many hours the department needed to actually reach the goals in the same Excel document to show the present state besides the wanted state. The numbers showed that last years level of staffed hours needed an increase with almost 50% in order to reach national goals for the processes. When the background was presented to the human resource personnel of how the managers at the department usually based this analysis on gut feeling, in the meaning of perceived knowledge of how to allocate best in order to meet the customer fluctuations. This is explained as a reason for the deviation in needed staffing hours to cope with the customer fluctuations.

Lastly, the managers analyse the different 'type days' to see how many customers are expected. Based on that the manager can calculate, with help of the statistics of the process times, how many employees are needed in each process for each 'type day'. For example, during "weak Monday" the department needs four cash desks, two repurchasing desks and so on, deciding how many stations that need to be staffed, and furthermore how many persons needed to cover those station the entire day. This information is inserted in the Excel file provided by HR.

"Workshop 2" – internal organizing

Workshop 2 is a meeting where HR, the head of department, department managers and finance department representatives are present to discuss the outcome of the *Personnel allocation in department per 'type day'* the department managers has provided. The aim is to give feedback and make sure that the allocation is done in a way to most accurately represent reality. Hence, the other participants' roles are to ask tough questions and make sure that the department managers have had a cost efficiency mindset in their allocation.

During the meeting, a lot of focus was put on the fact that the managers demanded 50% more staffing hours compared to last year. One strongly impacting factor for the increased number of hours demanded by the managers is planning on beforehand for absence due to sickness or care of child. The group looked closer to the trends of how many employees are absent each day and decided take a new approach. Instead of staffing *exactly* for how many employees are needed each day, they will staff extra employees, for example one employee, each day. This is based on the statistics that usually someone will unable to attend work, and then there is no need to call a new employee to cover for the missing employee. This action is in line with the department's goal of decreasing the number of employees working 'on demand' to

5% of the total hours worked at the department. Still, there is a mismatch between the forecasted personnel budget provided from 'Workshop 1' and what the department managers say they need to reach the process time goals in the department. This resulted in two decisions, first the department managers got the task to take an extra look at their departments and see if there are any potential synergies between the departments not used. Second, the head of the department would bring forward the question of asking for more hours to the department from the management team of the store. Here, the management team will have to deal with the question to limit the amount of hours given, resulting in longer waiting times for the customer or having to provide more staffing hours.

4.5 Merging Customers and Employees into schedule

The result of the two first parts in the process is that the customers are translated into a staffing needs represented in 'type days', and the employees are represented through planned personnel allocation at the department for each given 'type day'. In this sense, the customers and employees have taken the same form and can therefore be matched. Hence, the last part describes how the merging of customers and employees is done in the creation of the schedule and how the new schedule is used when next years scheduling period starts.

Insert 'type days' into scheduling system

When the forecast for staffed hours is set from 'Workshop 2', how many staffing hours they will use and at what stations, it is time for the Human Resource personnel to insert this information to the scheduling system. Since the size of the staffing budget is different for each year and the allocation within the department differs, the process has to be done each year. The Human Resource personnel transfers the information from the Excel document into their internal scheduling system. For this specific department there is a collective agreement saying that employee may not work in a cash register for more than two hours at the time, and not more than four hours each day. This means that the Human Resource personnel have to make a puzzle to move around employees between workstations to make sure that the cash registers are staffed the entire day, each day. At this stage no actual employees are inserted in the system but rather templates for each 'type day' is created. The process of inserting the 'type days' into the scheduling system is time-consuming and takes about one week to perform for the human resource personnel.

Matching the new schedule with actual employees

When the Excel documents with information about the employees different competencies and wishes is done it is time for the Human Resource personnel to insert the actual employees in the scheduling system. The Human Resource personnel describes that it is difficult to match the employee wishes with the customer needs. Usually, many employees do not like working evenings, although the store must be staffed each evening. It is also a time-consuming task to coordinate the different employees, who have different contracts and get the whole picture working. The

Human Resource personnel starts by adding the employees who work every other weekend on contract to make sure that they receive enough weekends to work on. After that, the supervisors are added to make sure that each day of the year is covered by this position. The next group to be put into the schedule are the employee who only has competencies to work at a few stations. Lastly, the employees with competencies on many, or all, workstations are distributed on the days and stations not yet filled. When the employees with contracts are inserted there are still gaps to fill in the schedule. The process of inserting the employees can be compared to a funnel. It is easier to insert employees in the beginning where all days and workstations are available, however, as the process goes on it becomes narrower and narrower.

Follow up

When the schedule is done it is time to give the union and the department managers a chance to look at it. This is done approximately six to eight weeks before the new schedule will be put in place. For example, the union reviews the finished schedule to make sure that all rules, such as the time for breaks between work sessions is according to law and collective agreements. Furthermore, the managers take a critical look to see if the break schedule during the day seems reasonable and so on. If there are any questions or complaints these are handled at this point.

Employees receive personal schedule

When managers and the union have approved the schedule the employees will receive their personal schedule showing how they will work the coming year. This is done four weeks before start. Since this occurs during the summer many employees are on vacation and receive their schedule by e-mail from the managers. However, those employees not on vacation will also receive a printed copy delivered in person from the manager in order to be able to answer potential questions. If there are any complaints from the employees regarding their schedule it is reviewed by the manager, human resource personnel, and unions representatives if necessary. If the complaint is relevant and approved then HR will add extra working periods for that specific employee. Here, one manager emphasize that it is important to also look at the soft values and take additional costs if it makes the employee happy.

New scheduling periods starts

When the new scheduling period starts all employees have their individual schedule to follow. The scheduling period extends over the next year and each day has a predefined 'type day' describing its customer pressure. Furthermore, each day has unique combination of employees. Therefore, the individual schedule printed or in digital form is used for the individual employees to know what days and times to show up at work.

Each morning the supervisor uses the internal scheduling program to see what employees are working that specific day. Then the supervisor transfers that

information to a Excel document in order to get a printed copy that provides a better overview of who is working at the different stations, and at what time everyone has breaks. The document is printed and put up on two places where all employees pass by when arriving at work. Thus, before the employees arrive at work they do not know at what stations they will work on.

Each day's schedule is supposed to mirror the reality of that day in terms of number of customers that will visit that day, and provide employees with competences to cover all stations at the department. In practice, however, the ability to match reality varies from day to day. Most days, the schedule match reality meaning that all scheduled employees show up for work at time, have the necessary competences to handle the scheduled workstations and is therefore prepared to meet the visiting customers. However, there are days where the schedule is not capable of handling the customer pressure. This is mainly because of three factors. First, an employee calls in sick, which leads to an understaffed department for that day. Second, that the scheduled employees have not received training on the station(s) he/she is scheduled to be working at, forcing the supervisor to rearrange the predefined organizing of work tasks between the employees working that day. This is described as a problem that should not exist but is a result of a miscommunication of how to plan for competences during the scheduling processes. It has, for example, happened that employees are scheduled at new competencies but that the department managers responsible have not given them training. Third, the customer pressure deviates from the forecasted, leading to an over- or understaffed department. This can happen for a variety of reasons; One example is due to particularly good weather tending to decrease the amount of visiting customers substantially at least for a short number of days. It goes the other way too. If it rains a couple of days in a row during the summer the amount of customers will take a chance of visiting the store resulting in lesser staffing than necessary. If overstaffed there is nothing the managers or supervisor can do to reach the actual customer pressure, resulting in unnecessary staffing costs. If understaffed however, the manager can see if any employee has reported interest in working extra that day, and call that person to provide working opportunity. Usually, there is someone interested, but this is not always the case.

In other words, most days the schedule actually provides a match between the staffed employee and arriving customers. In turn leading to pleasant working environment where each individual employee is given an opportunity to provide good service resulting in pleased customers. On the contrary, a mismatch between staffing and customer do occur resulting in what the employees refer to as a stressful environment being unable to provide good service to the customers.

5. Discussion

The aim of this thesis is to show how flexibility is achieved in practice by following a scheduling process. As presented in the case description the studied process shows

how customers' and employees' interests undergoes different forms of translations and are then merged together into the form of a schedule in the last section.

5.1 Translation of interests in the scheduling process

In the first part, when the customers walk through the store a number of translations occur and the customers take different forms and therefore creates new actors (Latour, 1993). First, as they enter the store they are translated into a number in the camera registering them as yet another customer. Then, if they end up buying any product they will be translated into one of the thousands of sales figures in the store's internal business system. Furthermore, if timing when the supervisor is measuring the queues the customer will also end up being part of the number that is translated into the form of an Excel document representing queuing time. A clear example of how objects can play a critical role in actor-networks is the faith put into the cameras counting the customers. As mentioned above, the camera has earlier proven to be inaccurate and no person has full control of it. Still, as numbers registered by the camera is summed up for the last year and is one of the multiplier in the formula for total sales, which is considered a truth of how many customers are likely to come next year. In this sense, the camera, and its output in the form of an number of customers, is an example of what Callon & Latour (1981) calls a macro actor: an actor that has great impact and is a taken for granted fact in the remaining part of the process of producing the schedule.

All the translations described above can be explained as a process where the customers' interests are translated by different actors involved (Callon, 1986). As the customers pass through the store, the head of the department together with the finance department, representing the management team, collects information trying to understand what the customers' interests are. Although each customer has unique needs and demands it is all summarized into a forecasted total sales, represented in 'type days', for the next year by the management team. In this sense, the customers' interests are now reduced to the number of customers visiting and at what time they will come to the store represented through the 'type days' (Callon, 1986). The 'type days' could also be described as the external relationships of which the firm needs to respond to (Lee & Hassard, 1999). In this sense, as 'type days' are decided the studied firm now 'knows' what customer fluctuations to organize their internal staffing level to.

In the next part the employees' interests are translated. When the management team have decided the forecasted sales for next year, they also decide the total budget for staffing costs based on what profit they aim to reach in the end of the next year. In this sense, the budget for staffing costs is here limited to the profit margins set by the management team. Thus, although the size of the staffing budget relates to the interests of the employees', to have enough staffing, it is here set in relation to the interests of the management team; to make profit. As the management team's interest comes into the picture and is prioritized, results in that the employees' interest is not fully heard, at least not to a level matching their interest is explained in the beginning

of the process. In this sense, there is a difference in what staffing level the employees think is needed, and how much their voice of realizing how much is actually staffed, can explain why they consider it understaffed. Although the total staffing budget has already been set by the management team, it is the input from the employees that will influence how the budget shall be allocated. The employees' interests are translated into inscriptions (Latour, 1988/1990) represented in paper forms with their individual wishes, and in turn translated by the department manager into an Excel document summarizing all their wishes. Furthermore, their interests are translated through formal and informal meetings with the department manager to give input of their experiences of how to allocate the employees (Callon, 1986). However, although the employees have given input of their interest through their wishes, the department manager could consider them unrealistic. An example could be that the employee does not want to work during evenings. However, since the customer will visit at evenings it is not a feasible option and the department manager actually puts the customer's interest before the employee's.

As the department manager shall decide how to allocate personnel resources in the department they try to balance the interests of employees and customers. First, they listen to the interest of the employees as described above to understand how they think a better working environment could be reached. Second, they take the customers' interest into consideration as they look at statistics for waiting times benchmarked with the company's central objectives to make sure that the customers will not spend too long time in queues at the department. Thus, the department manager has an active role in prioritizing and translating their interests. However, as the process moves on to 'Workshop 2' and the management teams are present there is an additional interest involved, to keep the staffing costs as low as possible. As the department managers may not use their proposed amount of staffing hours brought forward in 'Workshop 2' they are forced to compromise on the interests of employees' and customers' to prioritize the management teams' interest. What happens during personnel allocation and 'Workshop 2' is a good example of that the interests involved are under constant negotiation by the other actors in the network (Callon, 1982). Although the intentions of the management team is portrayed as in opposition to that of the employees' they to are interested in pleased employees as long as it does not provide any unnecessary additional costs. For example, the new idea of adding an extra person into the schedule, to prepare for an expected absence each day, is in line with the interests of all three groups. The department can in this sense provide more scheduled hours on contract to its employees, in turn securing staffing to meet customers while still not adding any staffing costs. For the employees, it means that they can enjoy more hours on contract and lesser employees have to rely on working on demand.

Furthermore, it becomes evident that the department's possibilities to have an internal organization being able to be responsive towards external relationships as discussed by Lee & Hassard (1999) rests on the fact that the firm *knows* what external

relationships to respond to. Ever since the firm decided what 'type days' each given day for the next year should have, the firm can adapt their internal organization, through personnel allocation discussed during 'workshop 2', to meet those customer fluctuations. Furthermore, the fact that the 'type days' at this stage is considered a fact of how many customers will come, is an example of how the customers interests now has become a black box.

In the last part, the human resource personnel produce the schedule by merging the employees' and customers' interests. In the beginning of the process the customers and employees were complex human beings with individual needs, wishes and demands. However, to merge them and place them into the scheduling system they have been translated into objects, represented in 'type days' and Excel files of employee wishes (Czarniawska & Joerges 1996). In particular, managers and the management team has formed their interests in a way to match the scheduling process. When the Human resource personnel insert the employees into the schedule it is done in a specific order. As described by the human resource personnel, to put the puzzle as easily as possible the employees with the narrowest contracts, in terms of time and competencies, are scheduled first and the employees with many competences are inserted afterwards. In this sense, it refers to what Atkinson (1984) calls the core group is least prioritized and will receive the workstations and working times left to fill in the schedule. Thus, the human resource personnel prioritize the part-time peripheral workers' interests before the full-time workers. In the end, the interests of employees and customers have been translated through a network of actors driven by managers, human resource personnel and the management team to end up in a physical schedule materialized in an inscription.

5.2 Achieving flexibility

This thesis aims to gain deeper understanding of how flexibility is achieved. Returning back to Latour (2005) stating that no circumstance, actor's significance or phenomenon is predetermined but is a result of a process. Thus, it was not predetermined how flexibility was achieved, but it was an empirical question how to define it. As the empirical case suggests, flexibility is achieved when the right amount of employees, with the right competences, at the right workstations with the right attitude matches the right amount of customers visiting that day. In short, when the employees show up for work according to the schedule and it matches the customers arriving according to the forecast. In this sense, flexibility is achieved as a result of a correctly planned schedule.

Returning to Atkinson and his view of flexibility he describes another way to achieve it: "For these employers, a change in the organization of work is seen as the best way of achieving greater flexibility from the workforce" (1984:4). Hence, he proposes that firms should organize according to the 'flexible firm' in order to achieve flexibility. In turn, implying that an inevitable part of being flexible is by using numerical flexibility, which in his case means using peripheral workers. In contrast, this case

provides an example where a company achieves flexibility with mainly permanent employments. Thus, it implies that peripheral workers are not a prerequisite for achieving flexibility but rather flexibility is achieved from a successful matching of interests of customers and employees.

However, sometimes the scheduling process fails to match the interests of employees and customer, resulting in that flexibility is not achieved. It is only when the process fails and therefore the department becomes understaffed that peripheral workers are called in to work. Hence, the company uses peripheral workers as a result of a failing scheduling process, in contrast to Atkinson (1984) who state that the use peripheral workers is a necessity to become flexible. The 'flexible firm' has been criticized by Sarantinos (2007) for creating a stressful environment for peripheral workers as they have insecure and temporary employments. This thesis shows an example whereas Sarantinos arguing is not sufficient to explain the case presented here. A stressful environment highlighted by Sarantinos (2007) does still occur, however, not as a consequence of how the 'flexible firm' is organized but rather as a result of the scheduling process' inability to achieve flexibility. In particular, this thesis shows an example where the stressful environment is not primarily dependent on what kind of employments, temporary or not, is used but that it arises although permanent employment are used.

In sum, as argued by Lee & Hassard (1999), flexibility is achieved by maximizing the responsiveness of external and internal relationships. This case provides an example of a firm that achieves flexibility as a result of a successful scheduling process where the interests of employees and customers are matched. In this sense, it provides new insights how flexibility is achieved since it differs from the traditional view put forward by Atkinson (1984) seeing flexibility as a capability that firm has, or can have.

5.3 Power relations

The case also provides implications of how power relations are structured between employer and employees. In this case, following the reasoning of Latour (2012) and the translation module, it provides an example where power is a result, rather than a cause. Power is the result of the employees accepting that their interests are translated and reduced to an object as input in the scheduling process. Thus, they accept being manoeuvred as objects by the other actors: department manager, human resource personnel and management team. By accepting this, the employees are participating in the process of producing the schedule. In the end, power is the result of that the employee shows up for work, at the given time, at a given workstation and with the right attitude following the schedule. Thus, the whole scheduling process is an exercise of power.

In contrast, power relationships in the 'flexible firm' can be seen in accordance with the diffusion module (Latour, 2012); where power is explained as a cause of the actor

initiating the exercise of the power: in this case the employer. The 'flexible firm' (Atkinson, 1984) implies that the employer exercises power as it provides an insecure working environment for the peripheral workers. The power relationships of the employers hence create an unbalanced job market where one group, the core, enjoys secure permanent employments and the other group, the peripheral workers, have an insecure working situation. In this sense, the uncertain and unbalanced job market is due to exercise of power from employers.

Returning to this case, sometimes the employees will not accept these translations, for example while complaining at their individual schedule for not fulfilling their expectations in wanted workstations or working time. In this sense, the employee does not accept the way in which it's interest have been translated and therefore not participating in the process of producing a matching schedule. Thus, the process fails as a result of the employees reversed power in its act of not participating. Furthermore, in situations where the process fails, for example when employees do not show up for work according to schedule, the department will call in peripheral workers. In that sense, when the firm uses peripheral workers it is because of lack of power, in contrast to Atkinson (1984) whereas the same action is actually an exercise of power. In sum, every time an actor approves that their interests are translated in such a way that it fits the scheduling process it results in an exercise of power, which also results in achieved flexibility. In contrast, every time that any actor disapproves of being translated in such a way, meaning that it somehow deviates from the matching of interests, it results in a reversed exercise of power, resulting in that flexibility is not achieved.

6. Conclusion & Implications

The purpose of this paper has been to investigate how firms can achieve flexibility in terms of staffing by answering the question: "How is flexibility achieved within a firm?" To take a closer look at flexibility in staffing strategy this thesis has conducted a case study of an international retail firm located in Sweden. The studied firm schedules in one-year periods putting a lot of faith in the process of producing a schedule that meets the customer fluctuations of the coming year. Hence, the process of producing the schedule takes several months including managers, Human Resource personnel and management team working actively with it taking customers and employees interests into consideration. By analyzing it from an Actor-network theory perspective and following how the actors' interests are translated in this process provides greater understanding of how flexibility is achieved. The empirical case suggests that flexibility is achieved when the right amount of employees, with the right competences, at the right workstations with the right attitude matches the right amount of customers visiting that day. In short, when the employees show up for work according to the schedule and it matches the customers arriving according to the forecast. In this sense, flexibility is achieved as a result of a correctly planned schedule.

By following actors relating to customer fluctuations and internal employees this study adds on Lee & Hassard (1999) research showing that the ability of achieving flexibility is to maximize the responsiveness of internal and external relationships. As a result, the case shows how a firm achieves numerical flexibility, not by hiring peripheral workers but through successful scheduling process that matches interests of employees and customers. In this sense, it provides new insight of how the internal and external relationships interact, and at the same time problematizes the 'flexible firm' (Atkinson, 1984) for not considering that interaction. Furthermore, this paper has problematized Atkinson's (1984) view of how flexibility is achieved; by organizing the workforce with a mix of core and peripheral workers, as it implies that an inevitable part of achieving flexibility comes from using peripheral workers. In contrast, this case provides an example where a company achieves flexibility with mainly permanent employments. Thus, it implies that peripheral workers are not a prerequisite for achieving flexibility, but rather flexibility is achieved from a successful matching of interests of customers and employees. Furthermore, this thesis contributes to flexibility theories as it problematizes earlier research such as the 'flexible firm' and gives additional perspectives of how flexibility is achieved.

The case also implies that the planned schedule is a result of an exercise of power relationships where all actors involved have approved of how their interests have been translated. Therefore, the whole scheduling process is in this sense an exercise of power. In contrast to the 'flexible firm' (Atkinson, 1984) as it implies that the employers exercise power as they provide an insecure working environment for the peripheral workers. Although the business environment is driven by uncertain market conditions and firms are forced to enhance flexible staffing solutions this thesis shows an example of how a retail firm manages to achieve flexibility by using primarily permanent employments. Hence, it provides practical implications of how retail firms can decrease the amount of insecure employment forms, and therefore provide a safer working environment, while not compromising on flexibility.

One limitation of the study is that it has only investigated one department within one retail store, which is not necessarily illustrating the realities of other retail firms. However, although it might not be a typical example it contributes with insight to learn from. The context of the firm, and the Employment Protection Act and union rules in Sweden might contribute to the fact that the firm has relatively many employees with permanent contracts. In this sense, limiting the possibilities in generalizing the results to other countries or cases whereas contextual factors are different.

The way in which this thesis has been conducted: following a scheduling process as a chain of translations is itself a contribution to research. The discussion of flexibility is yet a contemporary research field as business context changes become faster each year in the increasingly globalized world. Consequently, to gain new perspectives on how organizations become flexible is of interest and this thesis has shown that

analyzing flexibility from Actor-network theory shows potential into new insights. Therefore, further studies following processes of how flexibility is achieved may give such new insights.

7. References:

- Atkinson, J. (1984). 'Manpower strategies for flexible organizations'. *Personnel Management*, 16: 28-31.
- Bergström, O. (2001) "Externalization of employees: thinking about going somewhere else." *The International Journal of Human Resource Management* 12:3. 373-388.
- Callon, M. (1999) Actor-network theory: The market test. In: Law, J., and Hassard, K. (eds) (1999) *Actor Network Theory and after*. Oxford: Blackwell, 181-195.
- Callon, M. & Latour, B. (1981) Unscrewing the big Leviathan or how do actors macrostructure reality and how sociologists help them to do so. In: Karin Korr Cetina & Aaron Cicourel (eds) , *Advances in Social Theory and Methodology. Toward an Integration of Micro and Macro Sociologies*. London: Routledge & Kegan Paul.
- Cappelli, P. & Neutmark, D (2001). 'External job churning and internal job flexibility', Unpublished paper, Wharton School of the University of Pennsylvania
- Colclough, G and Tolbert, C. M. II (1992) *Work in the Fast Lane: Flexibility, Division of Labor, and Inequality in High-Tech industries*. Albany: SUNY.
- Coyle (1998) 'Jobs in a weightless world'. *Economic Report*, 12, no 5, London: Employment Policy Institute.
- Czarniawska, B (2014) *Social Science Research – From Field to Desk*. Dorchester: SAGE Publications Ltd.
- Czarniawska, B. and Joerges, B (1996) Travels of ideas. In: Czarniawska B. and Sevón, G. (eds) *Translating organizational change*. Berlin: New York: de Gruyter. 13-48.
- Czarniawska, B., and Hernes, T. (2005) *Actor-Network and Organizing*. Malmö: Liber AB.
- Deyo, F. C (1997) 'Labor and post-Fordist industrial restructuring in East and Southeast Asia'. *Work and Occupations*, 24: 97-118.

- Doogan, K. (2001) Insecurity and Long-term Employment. *Work Employment & Society*, September 2001, vol. 15, no. 3: 419-441.
- Foucault, M (1984) *The History of Sexuality, Volume 1: An Introduction*. R. Hurley (trans.). Harmondsworth: Penguin.
- Greimas, Algirdas Julien, and Courtés, Joseph (1982) *Semiotics and language. An analytical dictionary*. Bloomington, IN: Indiana University Press.
- Hunter, L., McGregor, A., MacInnes, J. and Sproull, A (1993). 'The "flexible firm": strategy and segmentation'. *British Journal of Industrial Relations*, 31: 383-407.
- Kalleberg, A. L., (2001) *Organizing Flexibility: The Flexible Firm in a New Century*. *British Journal of Industrial Relations* 39:4: 479-504.
- Latour, B (1988) *The pasteurization of France*. Cambridge, MA: Harvard University Press.
- Latour, B (1998b) "Etnografi av ett "high.tech" fall: om Aramis. In Bruno Latour, *Artefaktens återkomst*. Stockholm: Nerenius & Santérus Förlag.
- Latour, B. (1988/1990) *Drawing things together*. In Michael Lynch & Steve Woolgar (eds) *Representation in Scientific Practice*. Cambridge, Massachusetts; MIT Press.
- Latour, B. (1993) *We have never been modern*. Cambridge, MA: Harvard University Press.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford: Oxford University Press.
- Latour, B (2012) *Artefaktens återkomst*. Stockholm: Nerenius & Santérus Förlag.
- Law, J. (1994) *Organizing modernity*. Oxford: Blackwell
- Lee, N. and Hassard, J., (1999) *Organization Unbound: Actor-Network Theory, Research Strategy and Institutional Flexibility*. *Organization* 1999; 6; 391-404.
- Ouchi, W. G. (1980). 'Markets, bureaucracies and clans'. *Administrative Science Quarterly*, 25: 129-41.
- Sarantinos, V. and Co, J.s.c (2007) *Flexibility in the workplace: What happens to commitment?* *Journal of Business and Public Affairs*. Volume 1, Issue 2:1-10.

Sennet, R (1998) *The Corrosion of Character; The Personal Consequence of Work in the New Capitalism*, New York: W. Norton.

Smith, V. (1997) 'New forms of work organization'. *Annual Review of Sociology*, 23: 315-39.

Tsui, A. S., Pearce, J. L., Porter, L. W. and Hite, J. P. (1995). 'Choice of employee-organization relationship: influence of external and internal organizational factors'. *Research in Personnel and Human Resources Management*, 13:117:51.

Tullberg, M., Walter, L. and Blomquist, M. (2014) *Flexibel handel. En studie av bemanningsstrategier i svensk detaljhandel*. Gothenburg Research Institute report, 2014:3.

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