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# The Plausibility of One Department Spurring the Process Orientation of a Firm

A case study of Helsingborgshem

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# Abstract

This research examines the feasibility of initiating process orienting from one interdependent department in a firm. This was accomplished through interviews with the individual roles of the department studied as well as relevant project leaders and department managers on the board of directors. The findings suggest that the approach is viable based on the number of interdependencies mapped in the studied department and factors of support from the managerial perspective. This paper contributes a different approach and rationale for process orienting a firm.

**Keywords:** processes, process orientation, Business Process Orientation, organizational structures, business functions

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# 1 Introduction

## 1.1 Background

Concepts involving processes were born from the motion towards quality with its emphasis on diminishing deviation in production or flawed products (Davenport, 1993). The study of process organization gained importance in the late 1980s when enterprises realized their lack of efficiency and production rates (Hammer, 1996). In the global context, this meant their competitive advantage was dissolving and immediate change was needed to survive the changing markets (Hammer, 1996). Many firms were also faced with competition where quality and efficiency improvements were ten-fold, as opposed to ranging percentage-based improvements (Davenport, 1993). It is from these disparities that the foundation for process orientation was born (Hammer, 1996). Ever since, studies surrounding process organization have been prioritized in enterprises to ensure competitive advantage and optimize process efficiency, among other benefits. Firms and their management have become interested in organizational structures and business process management in the hope of maintaining resilience in the new age of technology (Hammer, 1996). Lack of efficiency within a firm can be attributed to variables, such as miscommunication between managers and workers (Kohlbacher, 2010), differing task or goal interpretations (Škrinjar & Trkman, 2013; Kohlbacher, 2010), or merely outdated resolutions that have been passed on from various predecessors of a role (Hammer, 1990). These areas of confusion are just a few of the challenges that process orienting aims to eliminate.

While process orientation is commonly explained in accordance with Business Process Management (BPM) and Reengineering (BPR), Business Process Orientation (BPO) is a broader term that can involve one or both of these specific terms. BPR refers to the revamping and design of processes to terminate task that do not add value to the firm, while BPM is the management of existing processes and/or following their redefinition (Armistead & Machin, 1998). Process orientation focuses on ensuring processes at the core of a firm's organization, despite the status of a firm's change program (Armistead & Machin, 1998).

## 1.2 Problem Discussion

While BPR, BPM, and BPO are well-researched subjects, literature implies that all-or-nothing overhauls are part of becoming a process organization (e.g., see Hammer, 1990; Hinterhuber, 1995). In one of his original works exploring BPR and process orientation, Hammer states: "Reengineering cannot be planned meticulously and accomplished in small cautious steps. It's an all-or-nothing proposition with an uncertain result." (Hammer, 1990, p. 105). Although he later retracts this statement in his book discussing Process-Centered Organizations in depth

(1996), it raises an important issue in BPM and BPR regarding a firm's resources and commitment. Ideally, a company can be optimized towards efficiency and maintain a competitive advantage, but as Hammer and Stanton (1999) assert in their later work, process centering an organization is not without strife or difficulty. Movement towards change can impact the firm through resource consumption, role disorientation, and even encourage doubt among personnel (Hammer & Stanton, 1999). Considering these risks, it is crucial for firms to find a viable way to implement processes into their existing structure. It has been argued that research surrounding process orientation is uncharted in the areas of its different methods, their results, and within the context of various firm types that utilize these concepts (Ittner & Larcker, 1997).

To the best knowledge of the researchers, there is little to no research examining the possibility of process orienting a particular firm beginning in one department. Hence, there is no research specifying which type of department would be best to initiate process orienting efforts. We, as researchers, feel the need to fill the literary gap and test the plausibility of new way of process orienting a firm.

### 1.3 Research Question

Is it feasible to initiate process orienting a firm with one department as the catalyst for change?

### 1.4 Purpose

The purpose of this paper is to examine if it is feasible to begin in one functional department when transitioning towards a process orientation. The researchers will collect in depth information and knowledge from a supportive department in Helsingborgshem, a Housing and Construction company. This research starts the developing of processes in one department in order to investigate whether this approach to process orienting is viable.

### 1.5 Limitations

The organization investigated in this research has a functional structure at its basis for interdepartmental projects, making it a combination of a project-based and functional organization. Due to this structure, there is a need to process orient both the project and functional tasks. Hence, this research is limited to this combination of organizational structures.

## 2 Literature Review

In the following section we will present the relevant theories to the research at hand. This section consists of a description of three organizational forms, namely, the functional, project-based, and process organization. This chapter covers the risks and benefits of process orienting a firm and concludes with factors necessary when moving towards a process organization, which were found through a literature study.

### 2.1 Organizational Structures

Organizational structures are an enduring configuration of an organization's activities. A prevailing feature of organizational structures are the regularities that come by using a specific structure (Ranson, Hinings, & Greenwood, 1980). These structures affect the flow of information within an organization and the ways in which employees communicate. Organizational structure impacts the way employees interact, collaborate, and coordinate their work. An organizational structure also implies the power and responsibility allocation in an organization, while managing departmental and employee tasks within particular groups or division (Miller, 1987).

According to Child and McGrath (2001), organizational forms are crucial for three activities in an organization. Firstly, an organizational structure is essential for establishing and spreading the common goals throughout the enterprise. Secondly, the organizational structure is essential to control the flow of resources into and out of the company. Lastly, this structure is fundamental for identifying and controlling responsibilities, functions and roles of the company employees. There are several organizational forms that can be used in organizations, three of which are elaborated on below.

#### 2.1.1 Functional Organization

The functional organization, also referred to as the 'traditional' structure is based on a pyramid structure comprised of hierarchies that are organized by the firm's various functions (Hinterhuber, 1995). Most practices within a functional structure originate from improvisations to complete an assigned task, which are based on the need and expectations at the time (Hammer, 1990). In the individual work functions, each of the departments within an organization have a specific field of responsibility (Khosravi, 2016). According to Galbraith (1971), this structure makes it easier for companies to have specialized skills within the organization. This allows for multiple specialists within the same field because varied areas of expertise can work together effectively. Therefore, employees specialized with a certain skill can be shared across projects or tasks depending on how much time is allocated. This

structure is of benefit to the employees as it gives them the advantage of climbing the career ladder and progress further in their specific role. The functional structure is beneficial for a firm considering that the organization can retain, cultivate, and utilize specialists (Galbraith, 1971; Turner & Keegan, 2001).

A disadvantage of the functional organization is the difficulty presented in using all of the specialized skills to complete a task within delegated timeframes and with an expected level of quality (Galbraith, 1971). One explanation for this is that within the functional organization there is a lack of resilience or the possibility of going back to a previous stage in a project or product life cycle, and that a sense of responsibility or accountability towards expected outcomes are lacking (Khosravi, 2016). The expansion of a functional organization can also create difficulties for specialized roles and management as it makes the planning of projects strategically complex and spreads various roles and management thinly. This potentially reduces their availability for urgent projects that require immediate expertise and creates a spillover effect of costs or neglected work for other adjacent roles (Armour & Teece, 1978).

### 2.1.2 Project-Based Organization

Project-Based Organizations (PBO) involve the formation of impermanent work groups responsible for performing a certain task (Ajmal, Takala, & Kekale, 2008). The project groups are usually made up of employees with heterogeneous professional backgrounds in order to create an original product or service (Almeida & Soares, 2014). Aside from the key characteristics of heterogeneous groups, there are five criteria that need to be fulfilled in order for something to be described as a project. The project needs (1) to be accepted in the organization, (2) have a clear goal, and (3) clear timeframe in which the project task should be completed. Additionally, the outcome of the work (4) should not be repetitive within the organization and (5) should be measurable in order to know when the project is done (Görling, 2009). Project-based organizations have the advantage of responding more flexibly to changes occurring in the organization's environment. This makes it an important role in the global economy, as it gives the organizations using projects a shorter development life-cycle and a competitive advantage (Almeida & Soares, 2014).

## 2.2 Process Organization

The concept of process orienting a company has been developed under a number of names, including Horizontal Organization (Ostroff, 1998), Process-Focused Organization (Gardner, 2004), Process Enterprise (Hammer & Stanton, 1999) and Process-Centered Organization (Hammer, 1990; Hammer, 1996). What these authors accomplish collectively is support of the significance and value of processes at the core of a firm's organization. In the 1990s, managers realized they were mending process issues with task resolutions. This stemmed from the evolution of elementary production needs to complex firms incorporating

automation and interdependent departments (Hammer, 1996). Hinterhuber (1995) claims that the move away from traditional organizations and towards process orientation was one of the most significant improvements for firms in the 1990s. Although, what he deems a paradigm shift for organizational structures (Hinterhuber, 1995), may have just gone unnoticed. As all firms, whether they are aware of it or not, are already comprised of business processes, even if they have yet to adapt to practices of process orientation (Škrinjar, Bosilj-Vukšić, & Indihar-Štemberger, 2008).

### 2.2.1 What is a Process?

To put it simply, a process is “a structure for action” (Davenport, 1993, p. 5). To fully understand a business process, it is important to differentiate between task and a process and to note that in BPM and BPR these terms are not necessarily interchangeable. A task is a component of work (Hammer, 1996), such as making a phone call or accessing a document for information. A process is a selection of linked tasks that produce an intended outcome, just as a broken water pipe needs to be reported, inspected, and serviced before the sink can be used again. Therefore, a business process is a group of connected tasks that create a valuable service for the customer (Hammer, 1996). Using the previous example, the service lies in the use of a working sink, which can only be maintained through these linked tasks that strive for this particular outcome. In the context of an entire organization, processes connect not just tasks, but also personnel and departments to create a line of production or service (Nadarajah & Kadir, 2014). The term workflow is also used interchangeably when discussing processes, tasks, and their improvement, although they represent something different. A workflow is a combination of business processes that are arranged in the sequence in which they should be carried out (Crampton & Gutin, 2013). Therefore, processes are an essential component in organizing or identifying workflows within a firm (Chyun-Chyi et al. 2015).

Similar to the aforementioned definition, a business process can be defined as a particular group of tasks that support a valuable service (McCormack & Johnson, 2001). More specifically, a business process can also focus on how work is carried out in a firm, as opposed to the product as the target or what object is produced from the work (Davenport, 1993). This definition is more commonly used in the context of BPM considering it lends itself to the understanding and control of existing tasks or processes. More importantly, in the context of BPO, Hammer (1996) deems a process as an end-to-end group of tasks that when combined, form value for the consumer. Based on the number of interpretations of what a process is, we can deduce that processes are deliberate tasks that perform a particular action when linked together. Developing an understanding of these various definitions is essential for managers and researchers alike when delving into the world of Business Process Orientation.

## 2.2.2 Process Orienting a Firm

The primary aspect that differentiates a Process Organization from other forms, is the end-to-end task reorganizing with customers as the focal point, as opposed to the immediate functional needs of various roles, as practiced in the functional structure (Neubauer, 2009; Gardner, 2004; Hammer, 2007; Hinterhuber, 1995; Khosravi, 2016). According to Hammer (1996), this is the “age of the customer” meaning that customers and thus process-centering are of utmost importance and should be the focus of a firm’s structure. Traditional or functional firms tend to lack customer cognizance (Hammer, 1996), although customers are the primary source that keeps the firm alive. Process centering can be viewed as moving closer to the customer while enhancing and controlling the firm’s organization and thus, its competitive advantage (Harrington, 1997). In terms of beginning to process orient, a firm does not involve creating processes, but instead, identifying and deliberately organizing the unseen processes that have been producing results all along (Hammer, 1996). Though existing processes can be unintentional and go undetected, they are a fundamental part of service and thus, value creation for a firm (McCormack, 2001). Centering around the core processes of an organization can diminish hierarchical obstacles that could impact efficiency (Ostroff, 1998). Comprehending how to manage processes while enhancing and centering around them is what Gardner (2004) deems the Process-Focused Organization. Each of these concepts share the push for processes as the core of the organizational structure in order to adapt to an internal and external customer focus.

## 2.2.3 Risks and Benefits of Process Orienting

### **Risks**

As in any company decision, risks should be identified before final decisions have been made and changes have begun. The same goes for process orienting a company, especially considering the scope of the changes and the resources involved. Hammer (1996) suggests that the ‘litmus test’ for process centering a firm is if the change upsets three or more employees, the change is likely headed in the right direction. While this test may prove true during the transition, it also reveals the stress among roles and employees when largely influential changes are put to action.

Initial difficulties for process orienting lie in entirely rethinking any original tasks with a process focus as the goal (Hammer, 1990). Communication is also an important factor in any change efforts, but inadequate communication among management and employees can decipher the success of adopting new behaviors, workflows, and overall integration of the project (Chyun-Chyi et al. 2015). In terms of support, Hammer (2007) warns that executives, particularly those that work in various functions, may disagree about which factors are meant to support process orienting and change initially optimistic views during the planned changes. Disagreements or lack of continuity among management can create confusion or doubt among the personnel (McCormack & Johnson, 2001). Perhaps, an even larger risk is the one presented if a firm chooses the wrong processes to invest in (Keen, 1997).

Aside from the aforementioned risks, Keen (1997) brings to light some of the issues involved in process orienting an entire firm. As one of the predominant critics of BPO, Keen introduces his concept of the 'process paradox', which refers to the varied success rates of BPO endeavors and argues that despite evolving towards a process-centered unit, these processes may not add value to the firm's organization. This means that while some processes may increase efficiency in certain areas, this value is not perceived or experienced by the customer, which is the goal when process-orienting a company (Keen, 1997). Khosravi (2016) suggests conclusively that in using the personal connections with employees and decreasing the effects of change on them, firms can consciously reduce the potential risks when process orienting.

## **Benefits**

Neubauer's (2009) research findings exhibited that the majority of the employees in a firm during process orienting were unaware of the benefits they would reap if the change program was successful. McCormack and Johnson (2001) also support the importance of benefit awareness among personnel and its implications as a basis process integration. This suggests that awareness of the benefits and risks of a firm can act as support and motivation for all those involved in process orienting. As aforementioned in the definition of process orientation, many variations of process orienting a firm can be found in the extensive research that surrounds it, but the benefits are commonly agreed upon. Table 2.1 illustrates the potential risks and benefits mentioned throughout the literature when process orienting a firm. Identifying both risks and benefits demonstrates that the benefits outnumber the risks in terms of literary support.

Predominant reasons for choosing to begin process orienting a firm include increased efficiency, customer satisfaction, and sustainable competitive advantage (Hammer, 1996; McCormack & Johnson, 2001), but according to the literature, there are a number of unexpected benefits that have been perceived among studies of process orientation. Acquiring a customer focus is one of the core goals of process orienting a firm. In process orienting, firms are becoming more receptive and reactive to customer demands because of the integration of processes throughout different departments (Hinterhuber, 1995). Kohlbacher and Reijers (2013) assert from their findings that firms who have a process orientation benefit from increases in customer satisfaction, efficiency, profitability, and reliability. Process orientation allows firms to think more collaboratively, which can increase their responsiveness to customer expectations (Nadarajah & Kadir, 2014). All the while maintaining cost reduction as an aim of process orienting endeavors (Hinterhuber, 1995).

Establishing performance measurements are another potential result of process orienting and a process can only be understood and improved if it can be measured or tracked (Hinterhuber, 1995). Through the coordination of processes by the process owners or managers, units of measurement can be established (Hinterhuber, 1995). Nadarajah and Kadir (2014) insist that a sustainable competitive advantage is achievable through efforts to process orient as it amends and diversifies the processes that create value for the customer. Similarly, adaptability to competition, market changes, and dynamic customers is a distinguishing factor for a firm,

which can be determined by the level of process orientation (Willaert et al. 2007; Nadarajah & Kadir, 2014).

According to McCormack and Johnson (2001), efforts to process orient a firm increase interconnectedness, enthusiasm, or ‘esprit de corps’ among the personnel. Similarly, employee empowerment can be considered a basis for successful process orientation (Hinterhuber, 1995). This increase can be attributed to minimizing of hierarchies and interdependence of processes across multiple departments (McCormack & Johnson, 2001; Škrinjar, Bosilj-Vukšić, & Indihar-Štemberger, 2008). Reducing vertical hierarchies can also decrease interdepartmental conflict that may have arisen when personnel were primarily responsible for their functional roles (Škrinjar, Bosilj-Vukšić, & Indihar-Štemberger, 2008). Through increased coordination of processes, process orienting contributes to improvements in business culture and overall performance of the firm (McCormack & Johnson, 2001).

Table 2.1 The Potential Risks and Benefits when Process Orienting a Firm

Potential Risks	Potential Benefits
Orienting the Wrong Processes	Customer Focus & Satisfaction
Inadequate Communication	Adaptability
Confusion of Personnel	Sustainable Competitive Advantage
View Misalignment among Management	Increased Efficiency
Changes do not contribute to customer value	Increased Reliability
	Increased Productivity
	Cost Reduction
	Increased Profitability
	Established performance measurements
	Minimizes Hierarchies
	Employee Empowerment
	Enhanced Corporate Culture
	Reduced Interdepartmental Conflict
	Overall Performance

## 2.3 Factors Affecting the Success of Process Implementation

### 2.3.1 IT Systems

Incorporation of technology and IT systems into a firm can provide a basis for successful process orienting. Even when technology implementation in firms was a relatively new field, researchers of process organizations understood its value and potential. Hammer (1990) asserted that there was an underdevelopment of technology in businesses and argued that before efforts of process orienting, firms were using new technology to digitize and speed up tasks, but not improve the processes with technology. Davenport (1993) supports this idea as

he argues that IT should be treated as an enabler for process orientation, not just another platform to complete a task. Additionally, with a better understanding of process orientation in a firm, existing systems can be manipulated to support processes in the best way possible (Davenport, 1993). Over a decade later, Hammer (2007) deemed IT systems and infrastructure as one of his five essential enablers for process orienting a firm. Furthermore, he argues that in failing to recognize and utilize IT systems as an enabler, it can negatively impact process performance. More recently, Škrinjar and Trkman (2013) deem IT systems as a critical success factor for becoming a process oriented firm and consider it a foundation for creating interdepartmental incorporation. In the current age, IT systems and applications are considered a prerequisite for facilitating and integrating business processes in a firm (Neubauer, 2009). Interestingly, in Neubauer's (2009) study regarding IT in BPM, he found that the majority of personnel expected the IT systems to be customizable and supportive of the firm's processes. Willaert et al. (2007) advocates for IT systems when process orienting and advises that systems have the capability of managing useful and pertinent information, which allows and encourages personnel to stay involved.

### 2.3.2 Clear and Open Communication

Communication is often considered one of the most significant factors in a business, as poor communication makes firms more susceptible to mistakes and confusion. According to Hinterhuber (1995) communication is considered a key factor by all top executives when adapting to a more process view in a firm. Open communication within a firm provides personnel with better access to information and builds an inclusive environment (Hinterhuber, 1995), while encourage collaboration when necessary. While over time communication has been implemented into IT systems, it allows communication to occur more frequently and quickly, leaving little excuse for poor communication practices. Not only does communication facilitate collaboration and innovation, but it can also be used to motivate personnel when process orienting a firm (Hinterhuber, 1995). Open communication can be seen as a tactic for ensuring continuity throughout a firm as it involves all roles and empowers decision-making among them (Hinterhuber, 1995). Communication in a firm sets a firm and its employees up for success in the change process. Process centering can be considered a shift in employee and role perspective, which ideally leads to behavioral shifts towards a customer focus (Hammer, 1996) and establishing new thought processes (Škrinjar & Trkman, 2013).

### 2.3.3 Understanding of Roles and Goals

Considering the discord that could arise in any changes efforts that impact delegation of personnel, comprehension of employee roles and the goals for becoming process oriented are a crucial factor for success. As stated above, communication is an integral part of ensuring continuity of expectations for change and informing personnel of their role's expectations. McCormack and Johnson (2001) argue that agreeing on tasks, processes, and their results is

critical to process orienting. Similarly, Gardner (2004) agrees that goal establishment and continuity is essential for process-centering a firm. Škrinjar and Trkman (2013) report that firms that allocated more time for training and communicating with their employees reached higher level of process orientation. Furthermore, comprehending how each role impacts other roles and processes is crucial incorporating processes in a firm (Škrinjar & Trkman, 2013). This understanding coincides with the specific strategy of process orienting in a firm, which should be shared throughout the organization (Škrinjar & Trkman, 2013). Comprehension of process goals and detailed documentation during each process is essential for tracking progress and efficacy of performance process-orientation, which has also been termed the 'Process View' (Willaert et al. 2007). Only through clear communication of these changing roles and expectations can a firm ensure employee participation in the change developments (Willaert et al. 2007).

### 2.3.4 Culture and Team Support

With the establishment of new roles from process orienting and the clear communication of what changes will be involved, comes the creation of a company culture. With processes orienting through multiple departments, an inclusive and open culture that supports these teams can encourage more seamless adaption to changes involved in process orienting. Biazzo (2002, cited in Movahedi, Miri-Lavassani, & Kumar, 2016) asserts that employee empowerment and team culture is an essential basis for the success of process orientation. The efficacy of process orientation efforts can be determined by a firm's 'esprit de corps', or team spirit, which can bring personnel closer and encourages dedication to movement towards a new or different organization (McCormack & Johnson, 2001). McCormack (2001) argues that the culture of a business process is focused on customers and spans across and beyond the functions that may already exist. This relates to Hinterhuber's (1995) idea that process orienting can be facilitated through introducing a holistic view of the processes into the personnel and fostering motivation in this team atmosphere. Additionally, he argues that many of the issues experienced when process orienting a firm are company culture based (Hinterhuber, 1995). Hammer (2007) gives way to this idea as he asserts that only a culture within a firm that is based on involved leaders, openness to change, accountability of individuals, and maintain a customer orientation can move towards process orienting. McCormack & Johnson (2001) discuss that facilitating inclusion of all personnel in some way in the change process will encourage successful implementation and camaraderie, while lack thereof could threaten to cut change efforts short. Team culture plays an important role for personnel as process orienting requires individual roles working together across departments to carry out the new processes (Armistead and Machin, 1998).

### 2.3.5 Managerial Support

While pressure may be placed on the importance of team culture and the transformation of individual roles within the processes, managers play a crucial role in facilitating these changes. Hinterhuber (1995) warns that without the support of managers, efforts of process orienting are likely to fall short. This reiterates the significance of management support in the process program (Kohlbacher & Grünwald, 2011). Similar to instilling company culture among personnel, managers need to uphold this holistic way of thinking about processes in the firm from end-to-end (Hinterhuber, 1995). Managers that are knowledgeable in IT and process orienting are significant for ensuring that all areas of a process can run to its best capabilities (Neubauer, 2009). Hammer (2007) asserts that this change of responsibilities extends to the senior managers and is often reliant on their devotion to the cause of process orienting. By setting an example and ensuring managerial support exists for personnel, process orienting can be pushed to its full potential (Kohlbacher & Reijers, 2013).

Table 2.2 Factors for Implementation & their Supporting Articles from the Literature Review

	Hinterhuber, 1995	Trkman, 2010	Kohlbacher & Reijers, 2013	Movahedi, Miri-Lavassani, & Kumar, 2011	Skrinjar & Trkman, 2013	Williaert, et al., 2007	Reijers, 2006	Kohlbacher & Grünwald, 2011	Kohlbacher, 2010	Ostroff, 1998	Hammer, 1990	Hammer & Stanton, 1999	McCormack, 2001	Davenport, 1993	McCormack & Johnson, 2001	Hammer, 2007	Kohlbaach & Reijers, 2013	Reijers & Mansar, 2007	Neubauer, 2009	Armistead & Machin, 1998	Hammer, 1996
IT Systems		x		x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	
Clear & Open Communication	x	x	x	x	x	x	x	x	x	x	x	x	x		x			x			x
Understanding of Roles & Goals	x	x		x	x	x	x		x		x	x	x	x	x		x		x		x
Culture & Team Support		x	x	x	x	x			x	x			x	x	x	x	x	x		x	x
Managerial Support	x	x	x	x		x		x	x	x					x	x	x	x	x	x	x

Process Orientation, BPR, & BPM are often used interchangeably in the works listed above.

Themes were only marked as present in the work if the text was specifically discussing process orienting a firm.

# 3 Methodology

This chapter will present the research method used in order to collect and analyze empirical data. The four main parts in this chapter are: (i) explanation of research approach and case study, (ii) selection of interviewees, formation of interview guides, and how the interviews were conducted, (iii) method used for analyzing the empirical data and (iii) ethical aspects considered in the research and finally the research reliability and validity.

## 3.1 Research Approach

In this research, the relation between the empirical data and theories is abductive. This is a hybrid of the induction and deduction approaches. Abduction is used in order to overcome the strict theory-testing of the deductive approach and the amount of data needed in the theory building of the inductive approach (Bryman & Bell, 2015). Hence, this was the best approach for the research since there is no literature to the knowledge of the researchers regarding the feasibility of process orienting a firm from one department. This makes theory building necessary, but in order to increase the validity of the findings, the researchers had to test if the company had the necessary factors to become a process organization. In accordance with this, a literature study was conducted to identify the most common factors for success with the development of a process organization.

## 3.2 Case Study

In order to answer the research question and fulfill the purpose of this study, a case study was conducted on a Housing & Construction company in Sweden called Helsingborgshem. The company consisted of a total of six departments and 200 employees.

Case studies are often used when a specific company or case is studied. The case can therefore be a defined entity or defined group of people. The aim of case studies is to gain an overall perspective of an issue by collecting as much information from the entity studied as possible (Patel & Davidson, 2003). The purpose of this research is to examine if it is feasible to begin in one functional department to transition towards a process organization.

Considering the research is company specific and that the case study approach is useful when one studies processes and changes (Patel & Davidson, 2003), this approach is the most suitable for the research at hand.

Within case studies it is common that the researchers use several ways of collecting empirical data (Patel & Davidson, 2003). This is done in order to attain as rich of an understanding of

the case as possible. Although work shadowing and workshops have been used as ways of understanding the company as a whole, the data collected to answer the research question was collected by using the qualitative approach. The qualitative approach was chosen as it provides the rich description needed to understand the work related to the department examined and since it is suitable to gain greater knowledge of the entire organization (Jacobsen, 2002).

## 3.3 Data Collection

### 3.3.1 Selection of Interviewees

There are several selection criteria that respondents for interviews can be selected upon (Jacobsen, 2002). The criteria for the first respondents in this research were that they were persons that could provide ample and good information (Jacobsen, 2002). This criterion is difficult to use, due to the fact that the researchers must have some knowledge about all the potential respondents (Jacobsen, 2002). Hence, the internal parties supervising the research assisted in selecting the right respondents for the initial interviews. The information criterion that the respondents selected in this stage had to fulfill was that they had to have either implicit or explicit knowledge about the processes in the department studied.

The department chosen for research in this study is responsible for Property Technology and Service. This department was of interest to study because the roles are very specialized in various technical skills, which requires them to be under the same department. Aside from being tied to functional roles, which are based on their specialized skills, the employees work with various projects in the organization and also support other functions. Due to their extensive knowledge in these areas, these roles are often involved in different project groups to solve issues that require their expertise. Seven out of the nine employees in the section were chosen for the first set of interviews (See Appendix 9.1.1). This was due to the fact that one of the two employees not interviewed was retiring as the research was made and the other one was not selected because that person recently started.

Based on information retrieved in the first interviews new respondents were pinned out. These respondent were crucial to interview in order to justify if the approach of beginning to process orient their firm from a functional and project-based organization was a viable one. These interviewees were also essential in verifying if the company had the foundation for moving towards a process organization. Therefore, a combination of the information and the snowball sampling (Jacobsen, 2002) has been used in this research to find suitable respondents. The roles selected (See Appendix 9.1.2) for the second set of interviews were the ones detected as important in the processes covered in the initial interviews as well as key persons in the development of the organization.

### 3.3.2 Interview Guide and Implementation

In order to answer our research question semi-structured interviews were carried out. Semi-structured interviews are what can be referred to as a respondent interviews. This means that the interviewer is the controlling part during the interview process and, to accomplish this, the interview needs to be structured to some extent (Robson, 2002). The strength that the qualitative research interview provides this research is that the questions can be rephrased and additional questions can be added to the interview in order to match the different roles of the interviewees. This was therefore suitable for the research in order for all the essential processes to be covered and considering it was not possible to know all important topics to cover beforehand for all of the roles interviewed.

To map the processes and acquire the most information from the interviewees, all the interviews were carried out in Swedish. In the first interview, a list of established questions were used as a guide in order for the researchers to make sure that no information regarding the processes were missed. After testing the interview guide, it was condensed to general topics that were relevant to most of the roles of the selected respondents. For the second set of interviews, a literature study was conducted in order to identify the most common factors for success with the development of a process organization. The questions in the interview guide were then based on the factors found in the literature study.

## 3.4 Analysis of Interview Data

In order to concentrate on the interviews and to prevent the loss of important information, all interviews were recorded and summaries were written (Robson, 2002). The written summaries were then used to map the processes. The process maps were then verified by the research supervisor at Helsingborgshem to ensure the processes were accurate. The validated processes were then used to see where the department intersected with other departments. For the second set of interviews, the recordings were summarized and translated. To analyze the data retrieved here, the information was categorized by the factors derived from the literature review.

## 3.5 Research Ethics

Within Social and Humanistic Science, the Swedish research council has established four general requirements that researchers should follow when conducting research. These requirements are as follows; (i) the researchers is obliged to inform the people involved in the research about the purpose of it, hence the researchers should make it clear to all the interviewees or participants what their role in the research is and how the information they provided will be used, this requirement is known as the 'Information Requirement'. (ii) The

second requirement is known as the 'Consent Requirement', this requirement states the interviewees and participants right to by the selves decide on what conditions the participate in the research and that the researchers needs consent from all the participants. This requirement gives the interviewees and participant in the right to decide the length and on which conditions they participate in the research. It also gives them the right to at any point cancel their participation without any repercussions. (iii) Within the research all personal information and records involving sensitive information about the participants is to be stored in a way so that they are not accessible to people outside the research in accordance with the 'Confidentiality Requirement'. (iii) The last requirement states that the data collected about the individuals participating in the research should not be used outside the scope or for any other purpose than the research at hand, this requirement is also known as the 'Usage Requirement' (Johannessen & Tufte, 2003).

In accordance with the previously stated requirements, the interviewees have been notified about the purpose of the interview and there has been clear and regular communication about the purpose of the research with the responsible parties at the company studied. All the requirements regarding personal data have been taken into account during and following the data collection, and the data have just been shared with the parties supervising the research.

### 3.6 Reliability and Validity

Ensuring validity in research means that the researchers make sure that the way in which they measure a concept is an accurate way of measuring it (Bryman & Bell, 2011). Reliability, on the other hand, is concerned with whether a study can be repeated and if the replication of the study would generate the same result (Gustavsson, 2004).

To ensure that our study is reliable the researchers have provided a clear description of the work process to provide the reader with a clear image of how the research was conducted and how the results were reached. During the data collection phase, the researchers made sure to only collect data from persons relevant to the department studied and the work of process orienting the company. The researcher also ensured, during this process, that all data collected were recorded appropriately. To achieve validity, the researchers reviewed all parts of the research process critically to ensure that the interview data was sufficiently pertinent to answer the research question and purpose. To further increase the validity, the interview questions and results have been reviewed by supervisors at both Helsingborgshem and the Lund University School of Economics and Management.

# 4 Empirical Data

This chapter will start by presenting the data collected from the first set of interviews that were conducted within a particular department of the studied firm. Synopsis of these interviews will be supported with process maps that were explained in each interview. There will then be a presentation of the second set of interviews. The presentation of the data will be categorized according to the factors found from the literature review (see Table 2.2). The data presented under this chapter is reduced from the original transcriptions.

## 4.1 First Set of Interviews

For the first round of interviews processes were mapped to investigate where the roles of the studied department intersected with other departments. In the following section processes for one role, namely the metering technician, will be presented as an example of how the processes look. The boxes and text that are marked in red represent the involvement or intersections of other departments in a process. All the process maps can be found in Appendix 9.2 - 9.7.

### 4.1.1 Sample of Processes

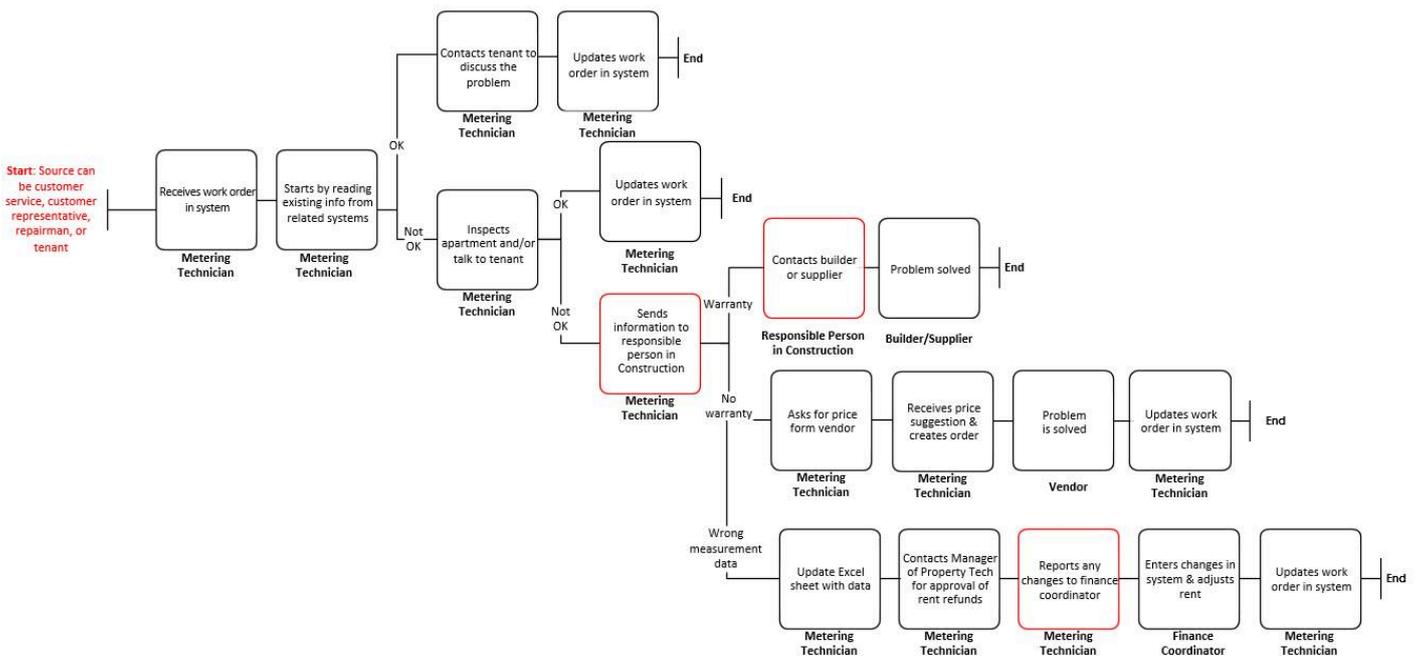


Figure 4.1 Investigations of Work Orders

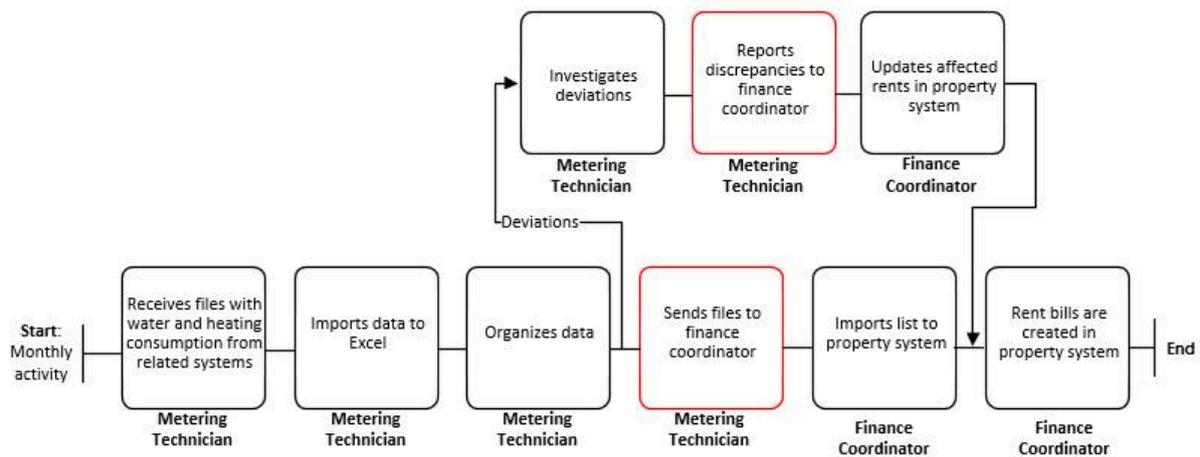


Figure 4.2 Rent Adjustments for Actual Usage

## 4.2 Second Set of Interviews

The second set of interviews were conducted with two members of the board of directors and three project leaders that work closely with the department studied in this research. Subjects discussed in these interviews were drawn from factors found in the literature review.

### 4.2.1 IT Systems

Table 4.1 Summary of Interviewee Responses Regarding IT Systems

Role	Answer
<b>Interviewee 1</b> Department Manager of Property Technology & Service and Board Member	Business development and IT is closely linked at the company. There cannot be business development without the influence of IT. She thinks that the IT systems support the processes in a better way than they did before, but that there is a long way to go. The biggest problem with the systems today is that they are not integrated and that there are systems that do not support what they are supposed to.
<b>Interviewee 2</b> Department Manager Construction and Board Member	She does not think that the systems they have today are supportive IT systems. They [the employees] currently have a good grip of the system where they handle 'economy', but the system they use for drawings from the projects does not currently support the company's needs. The drawings need to be

	<p>entered manually, which uses a lot of money and resources. Besides this, the interviewee thinks that the interface of the project system is too complicated for sporadic usage. If she wants information from it she would rather have someone else find it for her, and this is mainly due to the advanced interface. The system used during projects is complicated and cannot be used as a tool during maintenance, so it is only used during the projects. The people working in Administration cannot get the information stored in it, so they too have to ask for help. These types of requests can take between 30 minutes to an hour to obtain the right information. Aside from the system used for projects, documents are also stored in a folder structure on the company server. The folders and documents can either be private or searchable by everyone. They do not currently have any guidelines for how the information should be structured here. This makes it very difficult to find information among these folders that has been created by other employees.</p>
<p><b>Interviewee 3</b> Project Manager</p>	<p>The interviewee does not feel that there is anything missing in terms of systems, but he is sure that there are areas for improvement. For example, the interviewee thinks that improvements could be made to the folder structure within the project system that contains information about operations and maintenance. He thinks that the documents saved in this folder are unstructured and could be more organized. Other departments do not ask for these documents, but after-market and the customer representative sometimes request the inspection protocols. The vendors that use the project system during each project have had opinions about this as well. According to the interviewee, it would have been better to use the local server because it is faster and easier to search for information. The reason they cannot use the folders on the server is that people outside the company would not have access.</p>
<p><b>Interviewee 4</b> Project Manager</p>	<p>The maintenance tool is where they collect information about what needs to be done on the properties. Currently, it just has information about the exterior of the properties, roofs, windows, and facades. The system then tells them when the maintenance is supposed to be carried out.</p> <p>The main problem with the systems, according to the interviewee, is that they need to be used on a regular basis in order for them to be really good [useful]. The interviewee stated</p>

	that he would like if the different systems that they use could communicate with each other so all the information could be accessed in one place.
<b>Interviewee 5</b> Project Manager	The interviewee does not think any systems are missing, but thinks that the project system is inflexible. There are lots of requirements that need to be filled when someone wants to upload a document, but she does not know if the information input when uploading a document will be used for what it was intended (maintenance and archiving). The interviewee uses the folder structure on the local server to save documents before the project is formally created. The project system starts to be used when the requirements for the projects are established and external consultants gets involved in the project. It often happens that other employees ask for documents stored in the folder structure that they were not able to find on their own. The requests usually come from employees in the department that the interviewee works in [construction]. If the request comes from another department, it is usually something related to the projects that they are looking for. If someone asks for information stored in the folder structure, the information is found quickly. If the request is regarding a project that the respondent has taken over from someone else, it can take longer since they do not have the same structure.

#### 4.2.2 Clear and Open Communication

*Table 4.2 Summary of Interviewee Responses Regarding Clear & Open Communication*

<b>Role</b>	<b>Answer</b>
<b>Interviewee 1</b> Department Manager of Property Technology & Service and Board Member	There are personal relations established that work well, so there is a dependence on personal relations for the communication to work. Even with the implementation of processes they will be dependent on personal relations, but the processes will support the communication areas where there are no close relations. The communication is handled differently depending on what department you work in, and it needs to be this way, but they need to agree on which way is the most suitable. In the current state, there are no clear communication channels, the channel chosen depends on the sender's choice and that might not be the preferred communication channel for the receiver.

<p><b>Interviewee 2</b> Department Manager Construction and Board Member</p>	<p>The interviewee thinks that the implementation of processes will improve the communication between departments substantially. When there are issues it is often due to poor communication. She thinks that the communication will be improved due to the fact that there will be cross functional and mutual dependencies, besides the aforementioned the processes will increase the understanding for the needs of other employees. At the current state communication is handled differently depending on which department one works at and it is also dependent on personal relations. The most common way to communicate within and without the organization is by mail and face-to-face communication internally.</p>
<p><b>Interviewee 3</b> Project Manager</p>	<p>The interviewee thinks that the communication between the departments works well but that there can be improvements. He thinks that the improvements can be made in the projects since they are very long. Sometimes one or two months can pass before there is a new meeting and during that time a lot of things can have occurred. Sometimes people wonder why they have not received information on time. The interviewee thinks that face-to-face communication is most effective internally and externally.</p> <p>He states that mail is an effective way to communicate buy but that it is difficult to get the full understanding for something and that follow up questions may be required. For communication pure information mail is good but for discussions on ideas or thoughts face-to-face or phone is better.</p>
<p><b>Interviewee 4</b> Project Manager</p>	<p>The interviewee thinks that the communication between departments is good, and is usually face-to-face.</p>
<p><b>Interviewee 5</b> Project Manager</p>	<p>The interviewee thinks that the communication is good. How good the communication is varies between different departments. The interviewee states that the communication is dependent on personal relations but that it works well and does not see any particular area of communication that needs improvement.</p>

### 4.2.3 Understanding of Roles and Goals

*Table 4.3 Summary of Interviewee Responses Regarding Understanding of Roles and Goals*

<b>Role</b>	<b>Answer</b>
<b>Interviewee 1</b> Department Manager of Property Technology & Service and Board Member	<p>The interviewee thinks that the board of directors will get a better overview and understanding of the organization's different departments and how they are connected. For the employees it will become easier to comprehend their role. Besides the aforementioned, the employees can get an understanding of the different work tasks, the information they generate in those, where that information is used, and the result of their work. This is due to the fact that the processes cross various departments, if there is no understanding for these links it is hard for the employees to see the effect of their work. Ultimately, the interviewee thinks that how process oriented the firm will become depends on how detailed they make the processes.</p>
<b>Interviewee 2</b> Department Manager Construction and Board Member	<p>It will create a security within the work, especially for new employees to understand how work is done at the company. But there must be a balance it cannot be too strict. According to the interviewee the processes will make it easier for the employees at the Construction department to explain where in the projects they are and it will make it easier for other employees to see where in the projects they get involved and where they can come in to make a difference in the projects. There have been signals from other departments that they want to be more involved in the projects. So the processes will be a pedagogical tool to show how the processes look like and where in it they are.</p> <p>She thinks that the responsibilities within the projects are clear today, with the implementation of processes this will at least not decrease.</p>
<b>Interviewee 3</b> Project Manager	<p>The respondent thinks that the roles are clear today.</p>
<b>Interviewee 4</b> Project Manager	<p>Within the respondent's projects there has been no discussions about making process maps yet. He thinks this is because they are structured better within the projects that he works in. They have a clear image of what should be done in different stages. The interviewee says if the other projects have ten steps in their</p>

	processes, the ones he is responsible for can start at the fourth step, for example. There needs to be flexibility.
<b>Interviewee 5</b> Project Manager	<p>The interviewee thinks that the implementation of processes can make it clearer who does what. Currently there is no clear what is supposed to be done with the information and documents generated in a project after the project is done. It could be clearer but then it is also up to here to look it up.</p> <p>The interviewee also states that it is good to have a process to follow, but that everyone should be allowed to do things their own way. The processes should not be too strict. It should be possible to make some things that are different in them, if it is too strict creativity is lost.</p>

#### 4.2.4 Culture and Team Support

Table 4.4 Summary of Interviewee Responses Regarding Culture and Team Support

<b>Role</b>	<b>Answer</b>
<b>Interviewee 1</b> Department Manager of Property Technology & Service and Board Member	<p>The company's value-based work relies on: <i>We dare, we develop, we care.</i></p> <p>They rely on this in everything that they do, and this is their approach to reaching their goals. They have to care about each other, their customers, their suppliers, and others. They need to develop as an organization. They do not want to do as they always have been doing. To do this they have to be a bit courageous and dare to try new things.</p> <p>It is important that all the members of the organization accept the idea even if they do not love it. The employees' role in going towards process orientation is to come with input about how the daily work and how it could work better. Where are the challenges and where does it work as it should.</p>
<b>Interviewee 2</b> Department Manager Construction and Board Member	<p>The interviewee has just been on the board since the beginning of the year. In response to the question about whether they have talked to the employees about it [process orienting], she says that it is clear that they are going towards process orientation, but that the discussion about the employees has not occurred during her time there. She stated that it has most likely occurred before she entered the board. Within the board there is a mutual understanding for going towards process orientation. Even if it</p>

	<p>is not stated, the employees are already working in processes, they just do not have it on paper. There have been workshops with representatives from each department and all of the representatives there have been receptive to the changes.</p> <p>With the implementation of processes, the section managers are going to get more responsibility so that the department managers can work on a more strategic level. They are lifting the leadership in the entire organization. The interviewee states, in relation to the employee empowerment, that the changes have not been done in order to improve leadership but to improve the environment for the employees. They are supposed to feel creative and independent.</p>
<p><b>Interviewee 3</b> Project Manager</p>	<p>The interviewee thinks that the department he works in is ready to work towards process orientation. They have been talking about the need for processes maps for two years and there is a common understanding to why they need it. The interviewee supports the process orientation of the organization.</p>
<p><b>Interviewee 4</b> Project Manager</p>	<p>The interviewee supports the process orientation, he thinks that it will be beneficial in that sense that the employees will work in the same way. In response to the question regarding whether there is a common understanding or not within construction, the respondent replied that he thinks that there is and that it is wanted amongst the employees.</p>
<p><b>Interviewee 5</b> Project Manager</p>	<p>The interviewee supports the decision to go towards processes orientation in the organization. She thinks that a lot of the employees have experience from former employers and works so they can pick the best parts of the process orientation and exclude the parts that are not beneficial.</p> <p>If the employees are participating in the development of processes she thinks that it will become easier for them to follow them, and that they will get more in line with the everyday work. By letting the employees participating in the development of the processes they will become more of a tool to support then than a tool to control them. Besides the above stated she thinks that the processes will be more accepted since people feel included.</p>

## 4.2.5 Managerial Support

*Table 4.5 Summary of Interviewee Responses Regarding Managerial Support*

<b>Role</b>	<b>Answer</b>
<p><b>Interviewee 1</b> Department Manager of Property Technology &amp; Service and Board Member</p>	<p>The interviewee is a board member and supports the decision to go towards process orientation. She is also a member of the IT-council at the company, where they work with business development. In the council, they have talked a lot about process orientation since it is a good way to get an overview of the work, where there are bottlenecks, where things clash, or if there are parallel tasks. The interviewee thinks that processes are an effective way to create an organization where everyone is needed and where everyone produces work that pays off. She and a colleague have worked with increasing the knowledge about processes in the board of directors. They have also had a consultant explain why they should do this within the board. The interviewee thinks that the involvement of the board will have a great impact on what is happening in the organization. The direction that the board takes is ultimately the direction that the rest of the company takes. So the level and which direction board decides to take will impact the rest of the company, but she also states that there will be departments that push the processes further in order to fulfill their operations.</p>
<p><b>Interviewee 2</b> Department Manager Construction and Board Member</p>	<p>The interviewee states that there is a trust in the employees. She believes in employee empowerment and that not all decisions need to reach the board. There have been no agreements yet on which decisions should be handled by the work groups and which ones are supposed to be decided by the board. They will have to test this since it is a new way of working. The organization is going towards a flatter structure. She is a board member and supports the decision to go towards process orientation.</p> <p>In response to the question of what strengths the company has in order to move towards a process orientation, the interviewee says that because they have so many employees, they have the capacity to convert.</p>
<p><b>Interviewee 3</b> Project Manager</p>	<p>The interviewee thinks that the manager's support will affect the outcome of implementing processes. If the board of directors supports the changes and pushes for them, then it will have a positive effect on the outcome.</p>

<b>Interviewee 4</b> Project Manager	The interviewee thinks that it is up to the department to establish the processes and he does not see how the board gets involved there. The work of the board is to approve what they come up with.
<b>Interviewee 5</b> Project Manager	The interviewee thinks that the board of directors should initiate the change, but she does not know how hands-on they should be. The interviewee thinks that it is important that they are not the ones that develops the processes on their own. It should be developed between the board of directors and the employees.

# 5 Results

In this chapter, the data collected will be analyzed. Firstly, the intersections that occurs in the department studied will be presented, which were derived by analyzing the process maps. The chapter will end with presenting the analysis of the second set of interviews, which will be presented by the factors investigated.

## 5.1 Analysis for First Set of Interviews

### 5.1.1 Department Intersections

The table below (Table 5.1) illustrates the number of times a particular role interacts with another department. A tally was added for each time a process within one of the roles mentioned below intersected with a different department. These numbers are based on the processes (see Appendix 9.2 - 9.7) that were mapped from the interviews with each of the roles mentioned below. The Total of Department Intersections counted the number of different departments a role intersected with. The Total Number of Intersections sums up the number of times a role intersects with a different department within its processes. There are potentially more areas of intersection within this department, considering there are two additional roles that could not be interviewed for reasons mentioned in the methodology.

Table 5.1 Intersection of Processes between Individual Roles and Other Departments

		<b>Roles</b>						
		Property Technician Manager	Water & Sanitation Technician	Tele-Coordinator	Energy Controller	Electricity Coordinator	Installation Coordinator	Metering Technician
<b>Departments</b>	Board of Directors				1			
	HR & Management				1			
	Accounting & Finance Department	1	1	1	2	1	1	3
	Marketing & Business Development					1	3	
	Construction	3	3	2	5	1	7	2
	Administration	2	4	2	3	8	2	1
	<b>Total of Department Intersections</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>
	<b>Total Number of Intersections</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>12</b>	<b>11</b>	<b>13</b>	<b>6</b>

## 5.2 Analysis for Second Set of Interviews

Table 5.2 Factors for Implementation in their Current State based on Interviewee Answers

Factors	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
<b>IT Systems</b>					
Currently have supportive IT systems	+	-	+	+	+
Need for improvement	+	+	+	+	+
<b>Clear &amp; Open Communication</b>					
Currently have good communication	+	-	+	+	+
Need for improvement	+	+	+		-
<b>Understanding Role &amp; Goals</b>					
How processes will clarify roles	+	+			+
<b>Culture &amp; Team Support</b>					
Supports Process Orienting	+	+	+	+	+
Understands Need for Employee Involvement	+	+			+
<b>Managerial Support &amp; Involvement</b>					
Managerial Involvement	+	+	+	-	+
Managerial Support	+	+	X	X	X

Plus (+) indicates a positive or supportive response. Minus (-) indicates the interviewee disagreed or responded negatively. Exes (X) were placed in boxes where the question did not apply to that interviewee.

Boxes were left empty if respondents did not directly answer the question or maintained a neutral stance on the subject.

### 5.2.1 IT Support

All but one of the interviewees stated that the systems used today either support or provide better support than before. Although currently they have working systems, all of the respondents saw areas for improvement in the systems that they use. According to the interviewees, the main problem with the current systems is that they do not interact with each other. Even if there are systems that support the needs of the organization, the integration of them would further improve the IT support. Two of the respondents expressed that one needs to be a regular user in order for a system to be used in the best way possible. This indicates that the systems are present, but that deeper knowledge may be necessary in order to maximize its capabilities. While the company does not currently have the necessary IT support to speed up tasks within the processes, as Hammer (2007) argues, the interviewees have acknowledged the need for improvements and the supportive role that IT systems will play in the processes that will be implemented. In accordance with Hammer (2007), the respondents recognize that the IT systems will be an enabler for process orienting the organization. According to Škrinjar and Trkman (2013), IT systems are the foundation for communication between different departments at a firm. Based on the interviews, this interdepartmental communication seems to be working. Although, if the IT systems were to

be improved, the interdependencies between the different departments could decrease the time spent on searching for information and thus, could be used more effectively.

### 5.2.2 Clear and Open Communication

The communication within the organization was reported by four of the five respondents as already present and positive. This existing communication is a strong basis for process orienting a firm. In accordance with Hinterhuber's (1995) concept of achieving continuity, three out of the five interviewees implied that there was room for improvement when it came to communication practices. Three respondents reported that positive relations have been established between the many interdependent roles within the firm, which, according to Hinterhuber (1995) better the access to information and contributes to a more inclusive environment. Adversely, Interviewee 2 reported that when there is an issue, it is often related to internal communication. Just as Chyun-Chyi et al. (2015) warn, poor or insufficient communication can result in the demise of a change program. Even though one interviewee attributed problems to poor communication, we can deduce that overall there is a good basis for communication in the firm. Based on these observations within the company, employees do not hesitate to approach their colleagues with questions, which creates a foundation for an open environment.

### 5.2.3 Understanding of Roles and Goals

Three of the interviewees responded positively when discussing whether process orienting will impact the role definition within the firm. This coincides with McCormack and Johnson's (2001) idea regarding the critical nature of agreeing on tasks and processes when process orienting. Interviewee 1 asserts the significance of identifying the connections between interdependent roles throughout the firm as it will give the employees a better idea of how their tasks and responsibilities interplay with those across the organization. This supports Škrinjar and Trkman's (2013) concept of how a role impacts surrounding roles and related processes across departments within a firm. Interestingly, four of the five interviewees mentioned the importance of avoiding stringency in the roles as it could hinder the creativity that is often required for decision-making and problem solving. To the knowledge of the researchers, there is no direct support of this idea among the process orientation literature. This finding conveys the emphasis that employees place on ingenuity within their roles, while still moving towards a process orientation.

### 5.2.4 Culture and Team Support

All of the interviewees revealed support towards becoming process oriented, which shows that the vision is shared. The interviewees that are not in managerial roles imply that they want to be part of creating the processes in the organization, hence they are open to the

changes and feel the need to be involved in them, just as Hammer (2007) suggests. Of the interviewees that are on the board, one stated that even if the employees do not love the changes, it is important that they accept them. This implies that the interviewee, in accordance with McCormack and Johnson (2001), sees the need for inclusion and openness in order for the process orientation to be successful. Another interviewee that is a member of the board, implies the change towards a more horizontal organization with increased employee empowerment. This is in line with Biazzo's (2002, cited in Movahedi, Miri-Lavassani, & Kumar, 2016) beliefs that employee empowerment is essential for succeeding with process orienting a firm. Interviewee 2 states that in raising management higher in the firm, it will allow those involved in the processes to be more independent and feel empowered to make their own decisions. This correlates with Trkman's (2010) argument that individual roles should be more empowered and trained to make informed decisions when necessary, without needing the approval of their managers. Furthermore, three of the interviewees convey the importance of employee involvement in the change program, which can be interpreted as both managerial support and willingness to change. The information from the board members shows that they want employees to be included in the change project. Two of the employees state that it is commonly understood that they need to move towards a process orientation, which coincides with the board members' understanding of the employees' roles. The researchers believe that this common awareness and need for process orientation creates the team support required to begin changing.

### 5.2.5 Managerial Support

When the importance of managerial involvement was discussed, four of the five interviewees responded positively. This shows that interviewees that are from both the employee and board of directors sides agree that managerial support is necessary for process orienting. This contributes to a more holistic ways of thinking about process orienting (Willaert et al, 2007; Kohlbacher & Grünwald, 2011) and the significance of managers that will work to uphold it (Hinterhuber, 1995). Furthermore, both of the board members that were interviewed stated that they support the efforts to process orient. The importance of managerial support is asserted by both Hinterhuber (1995) and Kohlbacher and Grünwald (2011), as they argue that without this support, a firm's process orientation efforts are more likely to backslide. Moreover, Interviewee 3 specifically states that involvement of the board members will positively impact the efforts to change towards a process orientation and the outcomes. Kohlbacher and Reijers (2013) support the interviewee's idea as they argue that managerial support can set an example for personnel and push process orienting efforts to achieve its full potential.

## 6 Discussion

The purpose of this research has been to explore the feasibility of going from one functional department when process orienting a firm. From the initial readings on process orientation, no literature was found regarding the previously mentioned approach to process orientation. Therefore, the aim arose to fill this gap in the literature. In order to accomplish this, a case study was carried out on Helsingborgshem. In total, eleven interviews were conducted in which the researchers mapped one department's processes and investigated the company's overall potential of process orienting. Through this research we have found that initiating process orientation from one department as a catalyst for change is a viable approach.

In the first set of interviews, the researchers found that all other departments of the organization intersect, at some point, with one of the roles in the department investigated. The researchers found that these roles intersected with three to five other departments. Additionally, the total number of times a role intersects with another department ranges from five to thirteen. An intersection with another department can occur either in the beginning, middle, or at the end of a process. This shows that the processes in the department examined are not isolated from the rest of the organization and seems to form a hub with its interdependencies.

We, as researchers, believe that the process maps drawn can be used as a basis for developing processes for the rest of the organization. As illustrated in the process map (Figure 4.1), one can see that the process for Investigations of Work Orders starts with a request from Administration. To further develop processes, it is reasonable to map the processes for the role responsible for sending the request, and thus keep developing the processes for the entire organization. As aforementioned, with intersections in every department of the organization, the department investigated can be seen as the center of a larger web from where other processes can be developed. Hence, initiating process orientation with an interdependent section of a firm can provide a promising example for the remaining departments, should they want to continue process orienting from their points of connection.

In the second set of interviews, the factors derived from the literature review were investigated in order to see if the company maintained a good basis to begin process orienting. For the IT Support factor, the majority of the interviewees responded that the systems in place do work, while still asserting that issues lie in the integration of these systems among various roles or departments. The majority of the responses received about clear and open communication indicate that the department as well as the firm have working communication practices, but still support the importance of clear communication overall. When discussing the Understanding of Roles and Goals, the majority of interviewees affirmed that role definition would have a positive impact on the existing roles. From this discussion, unexpected information was disclosed regarding the stringency of role expectations and how

the interviewees felt it could hamper creativity needed for problem resolution. Support of moving towards process orientation was unanimous when discussing Culture and Team Support, which displayed the level of involvement from both the project leaders and members of the board of directors. Responses regarding managerial support revealed similar evidence as all but one of the interviewees asserted that the involvement of managers was significant when process orienting the firm. Concurrently, the responses from these interviews demonstrate that the firm not only entertained the idea of process orienting their firm prior to our research, but discussed its particular importance in the department studied. This indicates that a shift in perspective towards process orientation has already begun, which better prepares the firm for organizational change.

While the majority of the interviewees supported or reported the presence of the implementation factors, they also mentioned areas for improvement within each factor. We, as researchers, can deduce from the empirical data collected that the firm currently has established each of the factors for implementation, although some of the which contained areas for improvement. Collectively, this provides the firm with a good basis for moving towards process orientation. In having the factors for process orienting investigated and validated, we can ascertain that facilitating process orientation from one functional department is a viable approach. Not only is the company ready to begin process orienting from the investigated department, but as evidenced by the empirical data, it can better support the existing roles.

# 7 Conclusion

Much of the existing literature regarding BPR, BPM and BPO implies an all-or-nothing approach when process orienting a firm. Authors on the subject have argued that change efforts cannot be accomplished in small steps. On the other hand there are authors that argue that change efforts made when process orienting can have a negative impact on companies. Hence, finding a viable way of implementing processes in an organization is crucial. As mentioned above, existing research generally prescribes organizational overhauls for firms that are interested in becoming more process oriented. The works discussed in the literature review focus on how and why to process orient an entire firm, but not if it was reasonable to begin in one department. Thus, our research examined whether it was feasible for a firm to initiate process orienting from one interdependent department.

In order to investigate whether it was feasible to begin process orienting from one department, a case study was carried out. Our research findings suggest that departments with multiple interdependent roles within a company containing factors for implementation can focus on one department when initiating process orientation. Our research shows that within the firm studied, all other departments were reliant on the department examined in a variety of ways. This is evident in the number of departments the roles intersect with as well as number of times each role intersected with another department. These nodes where intersections occur can be used as starting points to further develop processes.

In focusing on one department in a firm that is largely functional and project-based, our research suggests that process orienting is a viable approach for firms of similar organizational structures containing multiple interdependent roles. Through this research we can conclude that the approach investigated for process orientation is feasible.

## 7.1 Future Research

Interesting areas for further research include comparing measurable risks from our suggested approach versus all-encompassing overhauls as suggested by other authors. One other interesting area of research would be to investigate what implications our approach to process orienting has for firms of other organizational structures, aside from functional and project-based organizations.

## 8 References

- Ajmal, M., Takala, J. and Kekale, T. (2008). Role of Organizational Culture for Knowledge Sharing in Projects. Portland International Conference on Management of Engineering & Technology, Cape Town, South Africa, Available Online: <http://ludwig.lub.lu.se/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=inh&AN=10152046&site=eds-live&scope=site> [Accessed 29 April 2016]
- Almeida, M.V. and Soares, A.L., 2014. Knowledge sharing in project-based organizations: Overcoming the informational limbo. *International Journal of Information Management*, vol. 34, no. 6, pp.770-779.
- Armistead, C. and Machin, S. (1998). Business Process Management: Implications for Productivity in Multi-Stage Service Networks, *International Journal of Service Industry Management*, vol. 9, no. 4, pp.323-336
- Armour, H. and Teece, D. (1978). Organizational Structure and Economic Performance: A Test of the Multidivisional Hypothesis, *The Bell Journal of Economics*, vol. 9, no. 1, pp.106-122
- Bryman, A. and Bell, E. (2011). *Business Research Methods*, Oxford: Oxford University Press.
- Bryman, A. and Bell, E. (2015). *Business Research Methods*, Oxford: Oxford University Press.
- Child, J. and McGrath, R. (2001). Organizations Unfettered: Organizational Form in an Information-Intensive Economy, *The Academy of Management Journal*, vol. 44, no. 6, pp.1135-1148
- Chyun-Chyi, C., Chun-Chi, L., Pei-Wei, T., Hsiang, C., Tien-Szu, P. and Xin-Hua, J. (2015). Process Definition and Property Analysis in Workflow Systems Using Petri Nets and Software Component Technology. Third International Conference on Robot, Vision and Signal Processing, Kaohsiung, Taiwan, Available Online: <http://ludwig.lub.lu.se/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=inh&AN=15758420&site=eds-live&scope=site> [Accessed 29 April 2016]
- Crampton, J. and Gutin, G. (2013). Constraint Expressions and Workflow Satisfiability, working paper, no. 1301.3402, Cornell University.
- Davenport, T. (1993). *Process Innovation: Reengineering Work through Information Technology*, Boston: Harvard Business School Press for Ernst & Young, Center for Information Technology and Strategy.
- Galbraith, J. (1971). Matrix Organization Designs: How to Combine Functional and Project Forms, *Business Horizons*, vol. 14, no. 1, pp.29-40

- Gardner, R. (2004). *The Process-Focused Organization: A Transition Strategy for Success*, Milwaukee: ASQ Quality Press.
- Gustavsson, B. (2004). *Kunskapande Metoder Inom Samhällsvetenskapen*, Lund: Studentlitteratur.
- Görling, S. (2009). *Att Arbeta Med IT-Projekt*, Lund: Studentlitteratur.
- Harrington, H. J. (1997). The Fallacy of Universal Best Practices, *TQM Magazine*, vol. 9, no. 1, pp.61-75
- Hammer, M. (1990). Reengineering Work: Don't Automate, Obliterate, *Harvard Business Review*, vol. 68, no. 4, pp.104-112
- Hammer, M. (1996). *Beyond Reengineering: How the Process-Centered Organization Is Changing Our Work and Our Lives*, New York: Harper Business.
- Hammer, M. (2007). The Process Audit, *Harvard Business Review*, vol. 85, no. 4, pp.111-123
- Hammer, M. and Stanton, S. (1999). How Process Enterprises Really Work, *Harvard Business Review*, vol. 77, no. 6, pp.108-118
- Hinterhuber, H. (1995). Business Process Management: The European Approach, *Business Change & Re-engineering*, vol. 2, no. 4, pp.63-73
- Ittner, C. and Larcker, D. (1997). The Performance Effects of Process Management Techniques, *Management Science*, vol. 43, no. 4, pp.522-534
- Jacobsen, D. (2002). *Vad, Hur Och Varför?: Om Metodval i Företagsekonomi Och Andra Samhällsvetenskapliga Ämnen*, Lund: Studentlitteratur.
- Johannessen, A. and Tufte, P. (2003). *Introduktion Till Samhällsvetenskaplig Metod*, Malmö: Liber.
- Keen, P. (1997). *The Process Edge: Creating Value Where It Counts*, Boston: Harvard Business School Press.
- Khosravi, A. (2016). Business Process Rearrangement and Renaming: A New Approach to Process Orientation and Improvement, *Business Process Management Journal*, vol. 22, no. 1, pp.116-139
- Kohlbacher, M. (2010). The Effects of Process Orientation: A Literature Review, *Business Process Management Journal*, vol. 16, no. 1, pp.135-152
- Kohlbacher, M. and Grünwald, S. (2011). Process Orientation: Conceptualization and Measurement, *Business Process Management Journal*, vol. 17, no. 2, pp.267-283
- Kohlbacher, M. and Reijers, H. A. (2013). The Effects of Process-Oriented Organizational Design on Firm Performance, *Business Process Management Journal*, vol. 19, no. 2, pp.245-262

- Mansar, S. L. and Reijers, H. A. (2007). Best Practices in Business Process Redesign: Use and Impact, *Business Process Management Journal*, vol. 13, no. 2, pp.193-213
- McCormack, K. (2001). Business Process Orientation: Do You Have It?, *Quality Progress*, vol. 34, no. 1, pp.51-58
- McCormack, K. and Johnson, W. (2001). *Business Process Orientation: Gaining the E-Business Competitive Advantage*, Florida: St. Lucie Press.
- Miller, D. (1987). Strategy Making and Structure: Analysis and Implications for Performance, *Academy of Management Journal*, vol. 30, no. 1, pp.7-32
- Movahedi, B., Miri-Lavassani, K. and Kumar, U. (2016). Operational Excellence through Business Process Orientation: An Intra- and Inter-Organizational Analysis, *TQM Journal*, vol. 28, no. 3, pp.467-495
- Nadarajah, D. and Kadir, S. (2014). A Review of the Importance of Business Process Management in Achieving Sustainable Competitive Advantage, *TQM Journal*, vol. 26, no. 5, pp.522-531
- Neubauer, T. (2009). An Empirical Study About the Status of Business Process Management, *Business Process Management Journal*, vol. 15, no. 2, pp.166-183
- Ostroff, F. (1998). *The Horizontal Organization: What the Organization of the Future Looks Like and How It Delivers Value to Customers*, New York: Oxford University Press.
- Patel, R. and Davidson, B. (2003). *Forskningsmetodikens Grunder: Att Planera, Genomföra Och Rapportera En Undersökning*, Lund: Studentlitteratur.
- Ranson, S., Hinings, B. and Greenwood, R. (1980). The Structuring of Organizational Structures, *Administrative Science Quarterly*, vol. 25, no. 1, pp.1-17
- Reijers, H. A. (2006). Implementing BPM Systems: The Role of Process Orientation, *Business Process Management Journal*, vol. 12, no. 4, pp.389-409
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*, Oxford: Blackwell.
- Škrinjar, R., Bosilj-Vukšić, V. and Indihar-Štemberger, M. (2008). The Impact of Business Process Orientation on Financial and Non-Financial Performance, *Business Process Management Journal*, vol. 14, no. 5, pp.738-754
- Škrinjar, R. and Trkman, P. (2013). Increasing Process Orientation with Business Process Management: Critical Practices, *International Journal of Information Management*, vol. 33, no. 1, pp.48-60
- Trkman, P. (2010). The Critical Success Factors of Business Process Management, *International Journal of Information Management*, vol. 30, no. 2, pp.125-134

Turner, J. and Keegan, A. (2001). Mechanisms of Governance in the Project-Based Organization: Roles of the Broker and Steward, *European Management Journal*, vol. 19, no. 3, pp.254-267

Willaert, P., Van Den Bergh, J., Willems, J. and Deschoolmeester, D. (2007). The Process-Oriented Organisation: A Holistic View Developing a Framework for Business Process Orientation Maturity in Alonso, G., Dadam, P. and Rosemann, M. (eds) *Business Process Management*, Heidelberg: Springer-Verlag, pp.1-15.

# 9 Appendix

## 9.1 Interviewee Information

### 9.1.1 Interviewees Descriptions for the First Set of Interviews

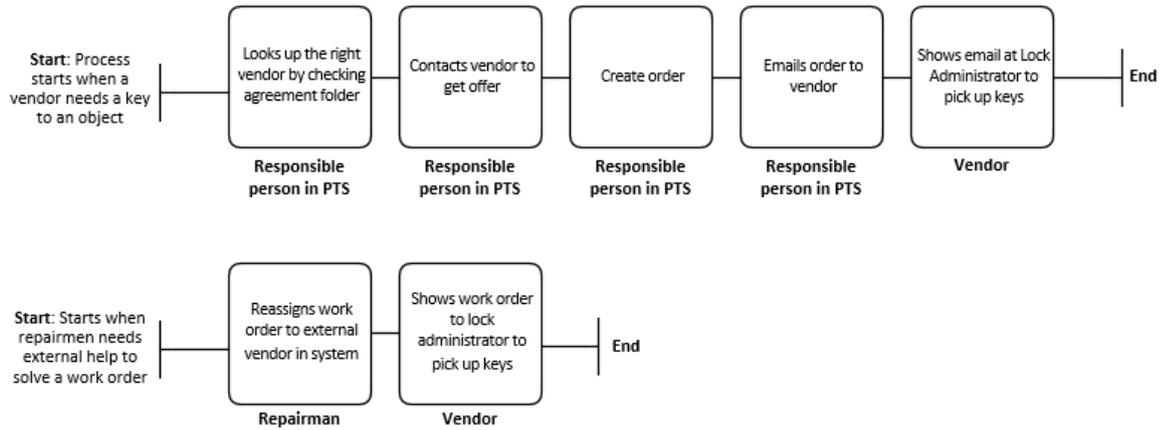
1. Property Technician Manager: responsible for the everyday work and monitoring of the section.
2. Water & Sanitation Technician: responsible for heating, ventilation and sanitation in planned maintenance, new construction and rebuilding. This role is also responsible for inspections related to the aforementioned areas.
3. Tele-Coordinator: responsible for fire and security alarm, automatic lock systems and emergency communication in the elevators in all the properties.
4. Energy Controller: responsible for controlling the energy consumption in the properties and energy statistics.
5. Electricity Coordinator: responsible for the electricity in the apartments, and for electricity installations in planned maintenance, new construction, and rebuilding. This role is also responsible for electricity inspections in the properties.
6. Installation Coordinator: responsible for all the installations in new construction and rebuilding. This role is also responsible for the ongoing inspections in construction projects.
7. Metering Technician: responsible for controlling the temperature and temperature measuring devices in the apartments.

### 9.1.2 Interviewees Descriptions for the Second Set of Interviews

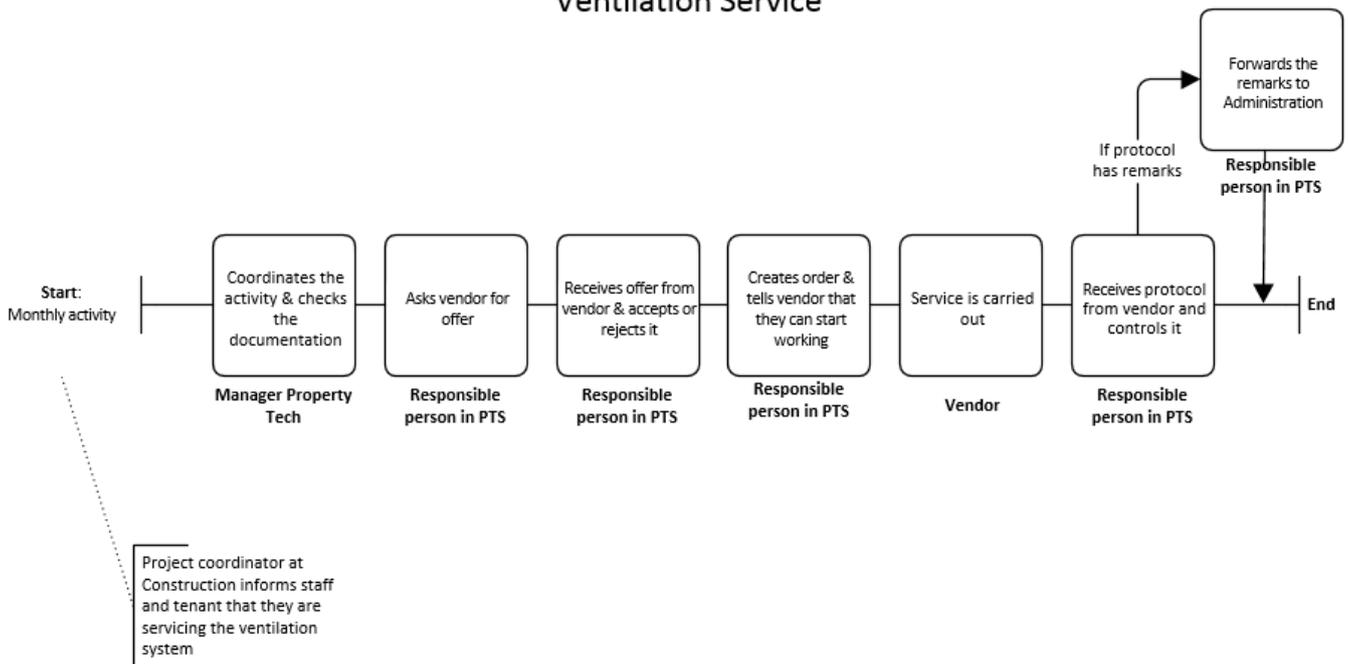
1. Department Manager of Property Technology & Service and Board Member: responsible for the Property Technology & Service Department and serves on the Board of Directors
2. Department Manager of Construction and Board Member: responsible for the Construction Department and serves on the Board of Directors
3. Project Managers (3): each of the three project managers is responsible for either Planned Maintenance or New Construction & Rebuilding

## 9.2 Property Technician Manager

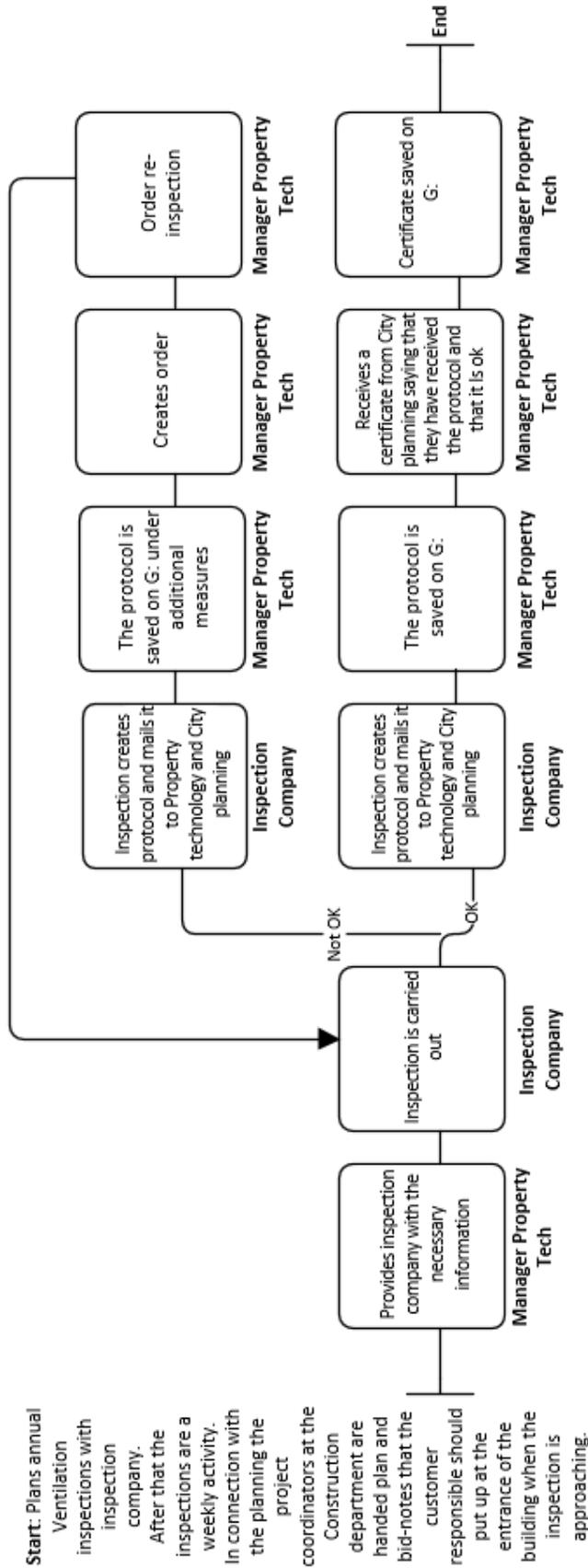
### Master Key Tracking



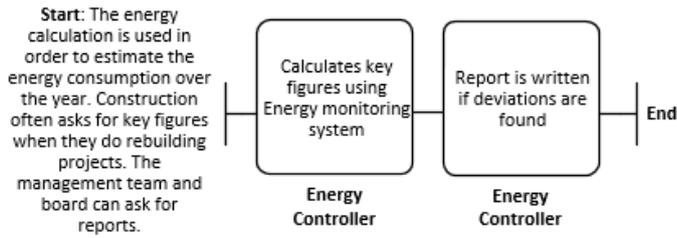
### Ventilation Service



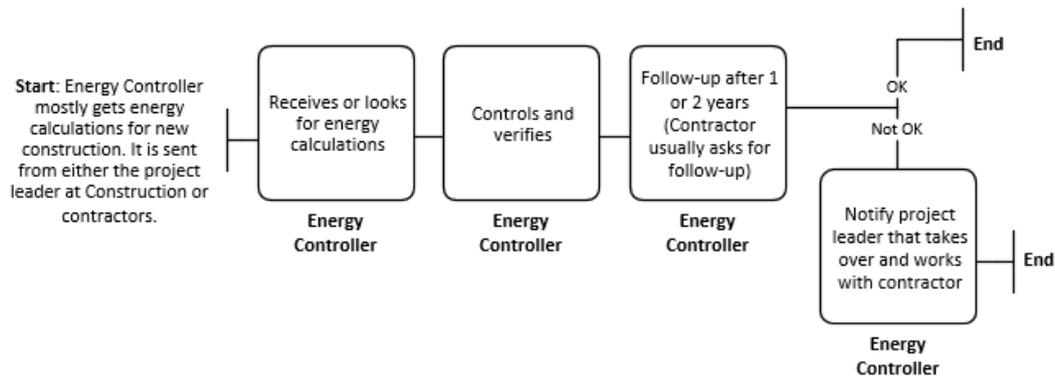
# Mandatory Ventilation Control



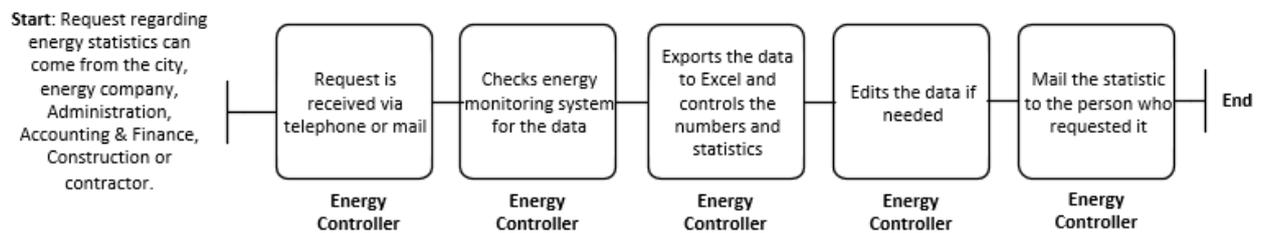
## Key Figures



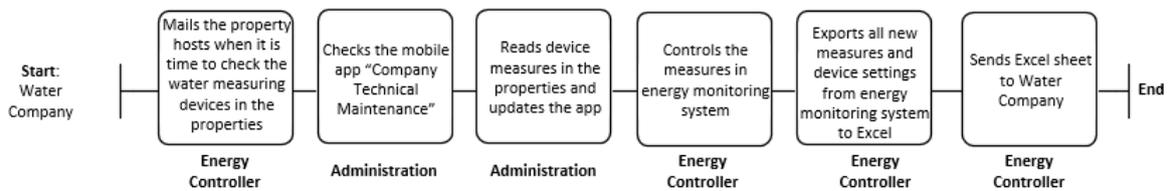
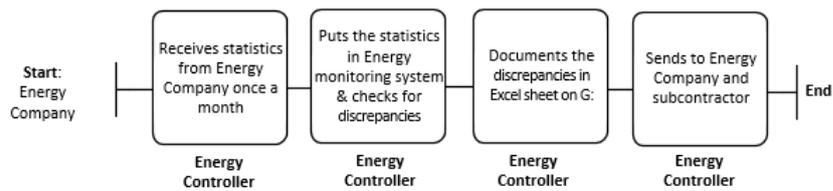
## Energy Calculations



## Deriving Energy Statistics

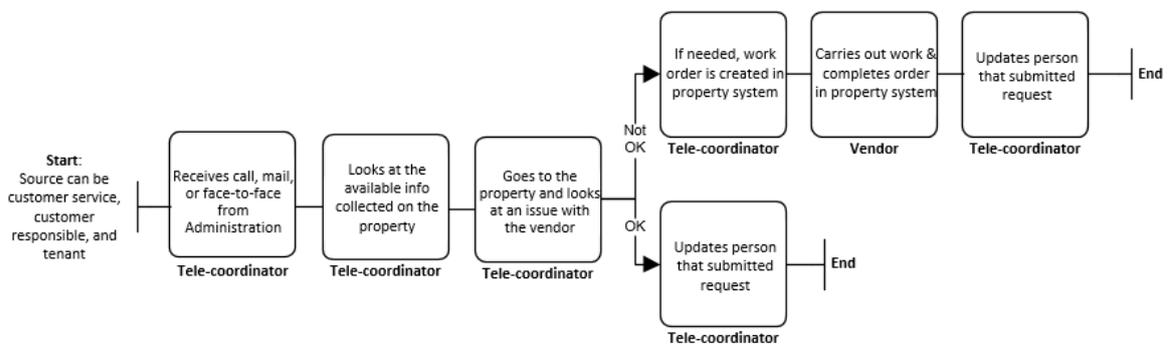


## Report to Energy Company and Water Company

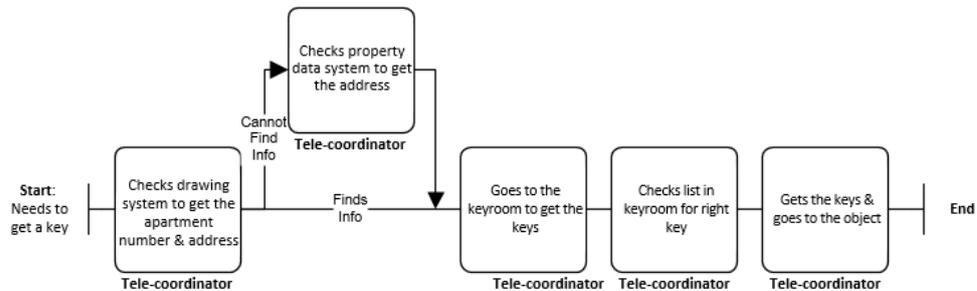


## 9.4 Tele-Coordinator

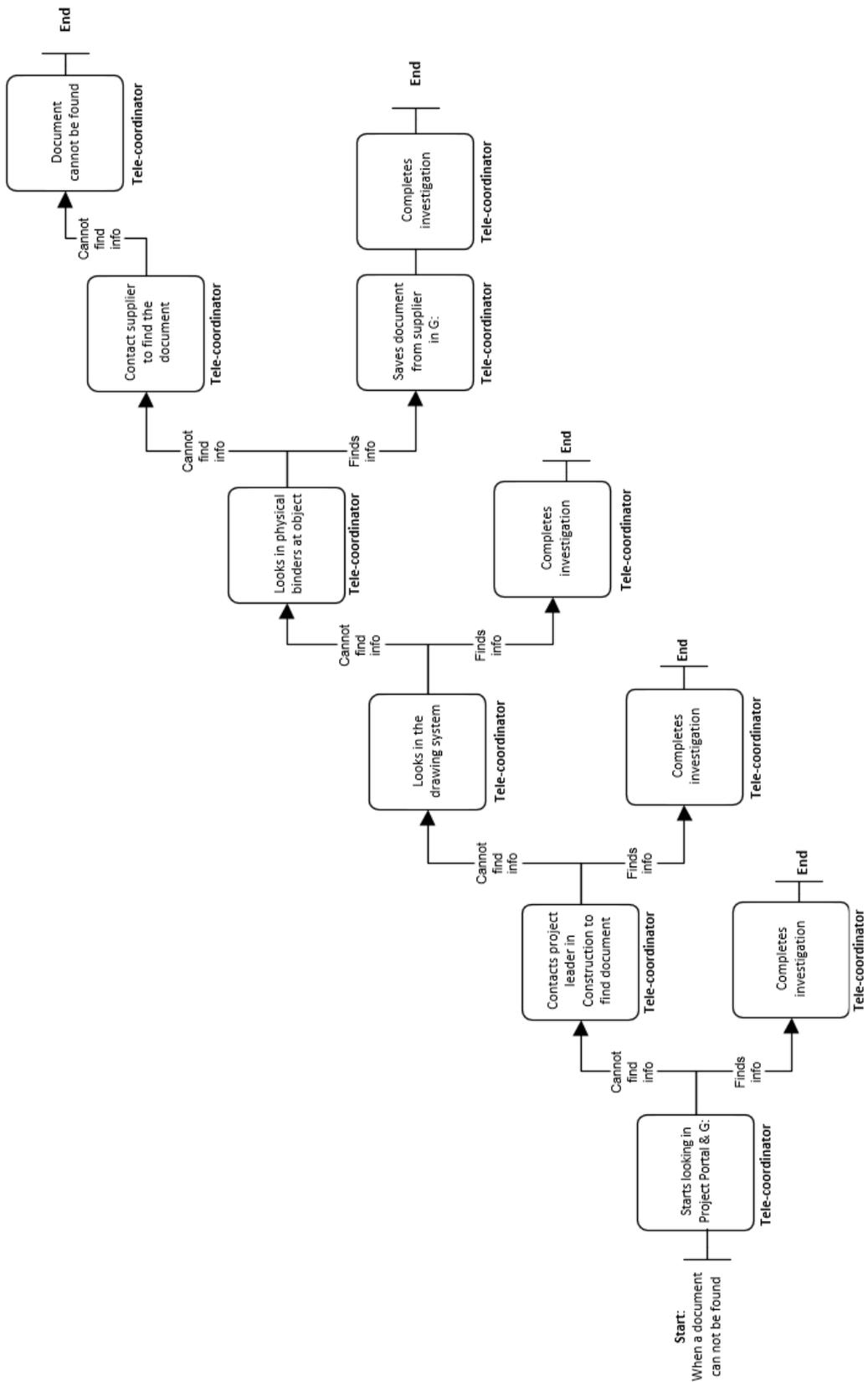
### Building-Related Ad Hoc Issues



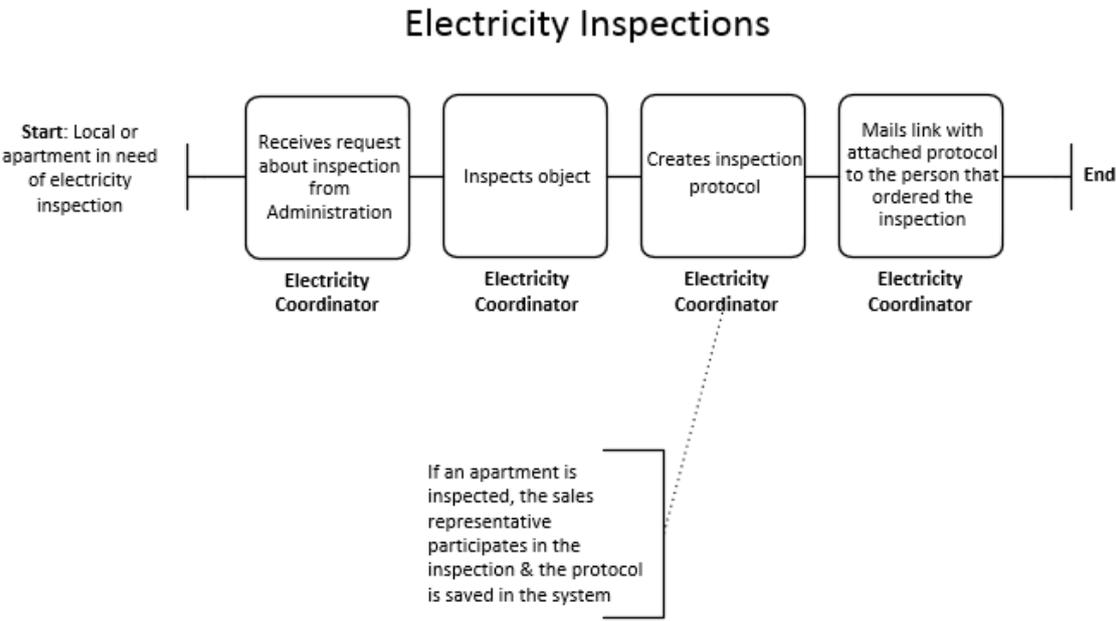
### Accessing Locked Spaces Apartments, Objects, or Binders



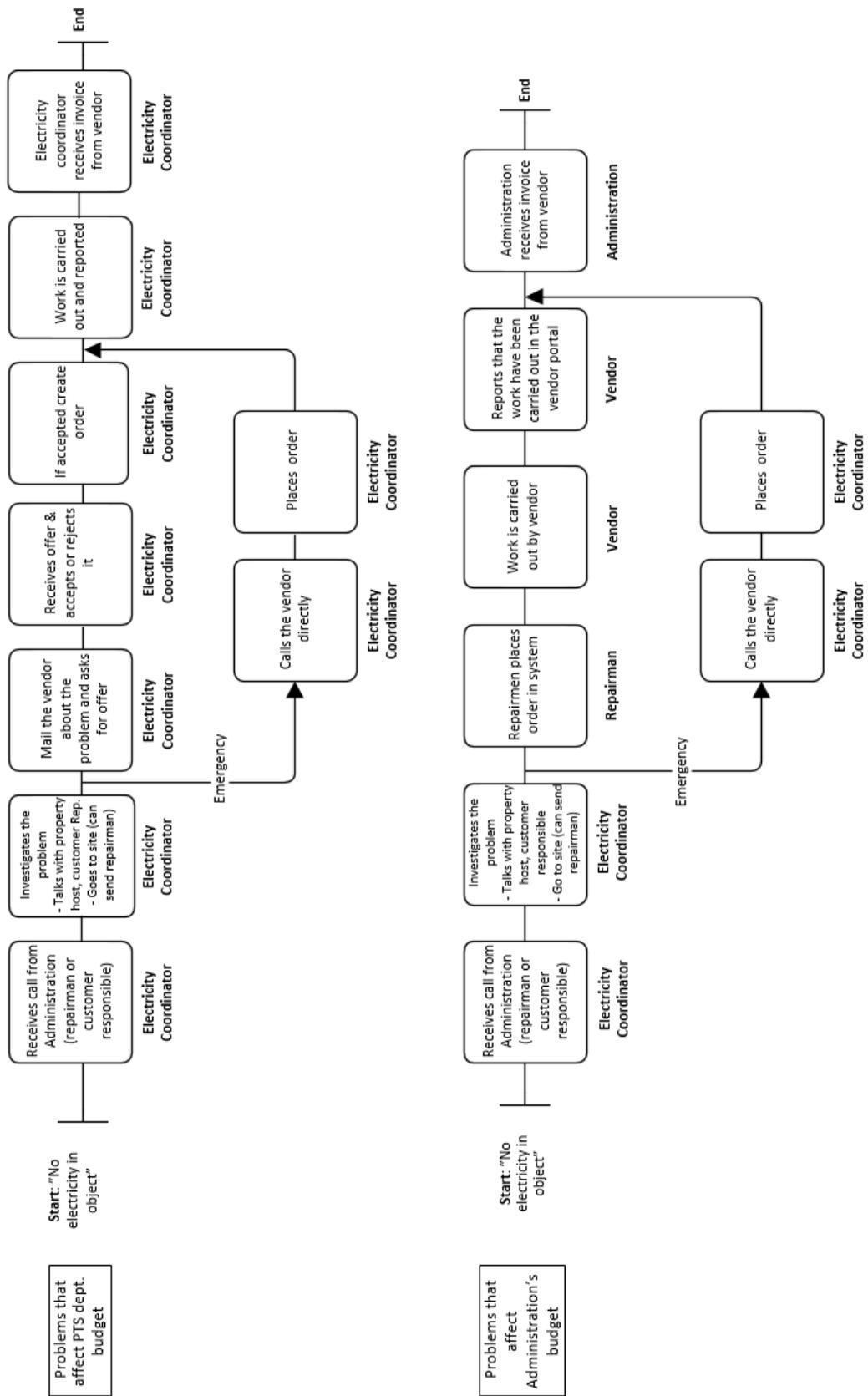
## Process for Finding Property Related Documents



# 9.5 Electricity Coordinator

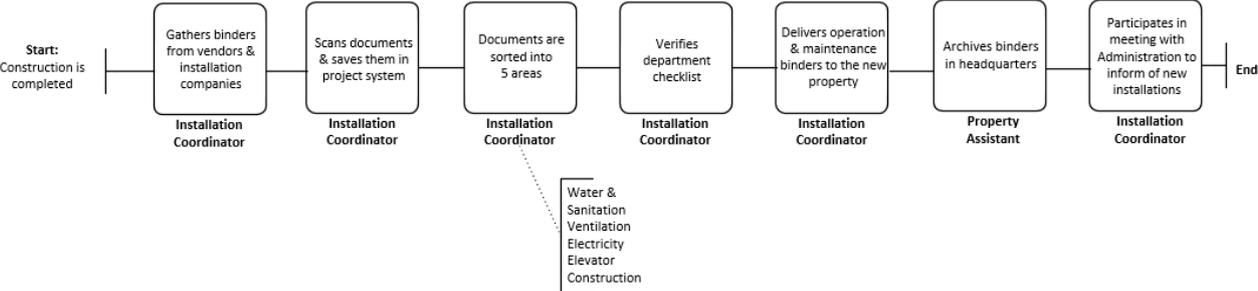


# Electricity Related Work Orders



# 9.6 Installation Coordinator

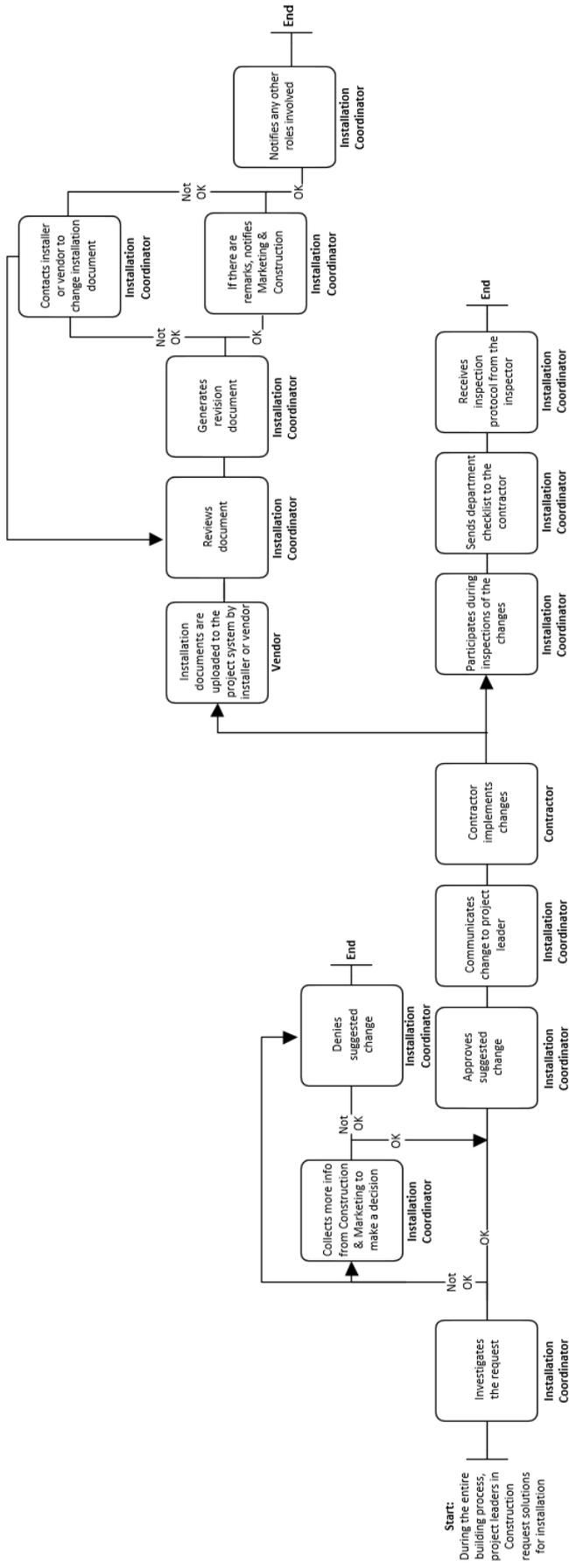
## Operation & Maintenance



## Before Construction Begins

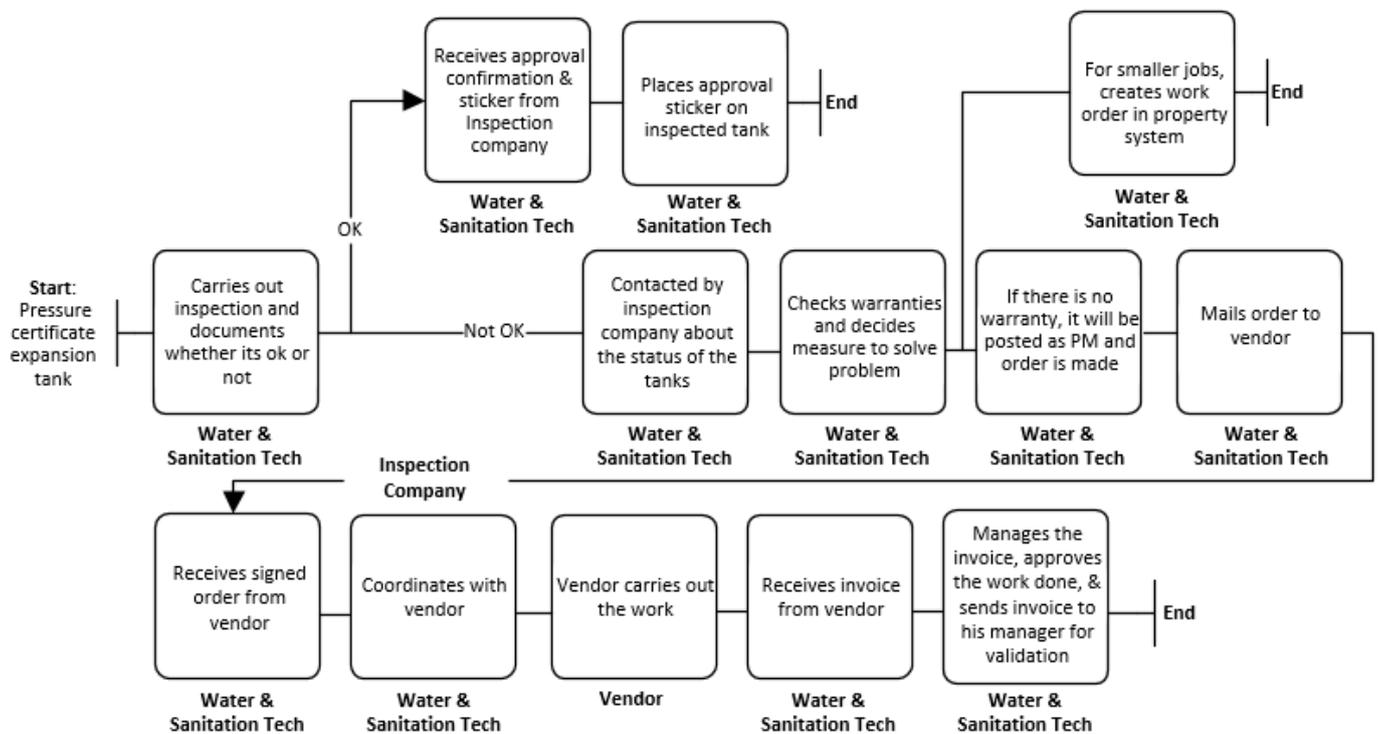


### During Construction

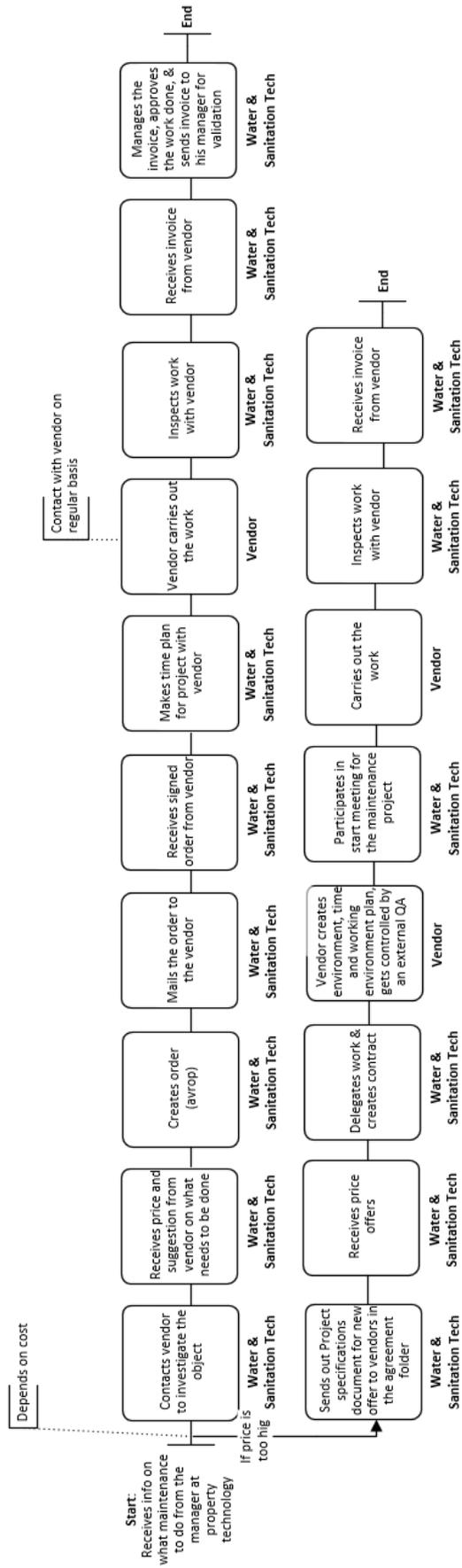


## 9.7 Water and Sanitation Technician

### Government Inspections for Expansion Tank

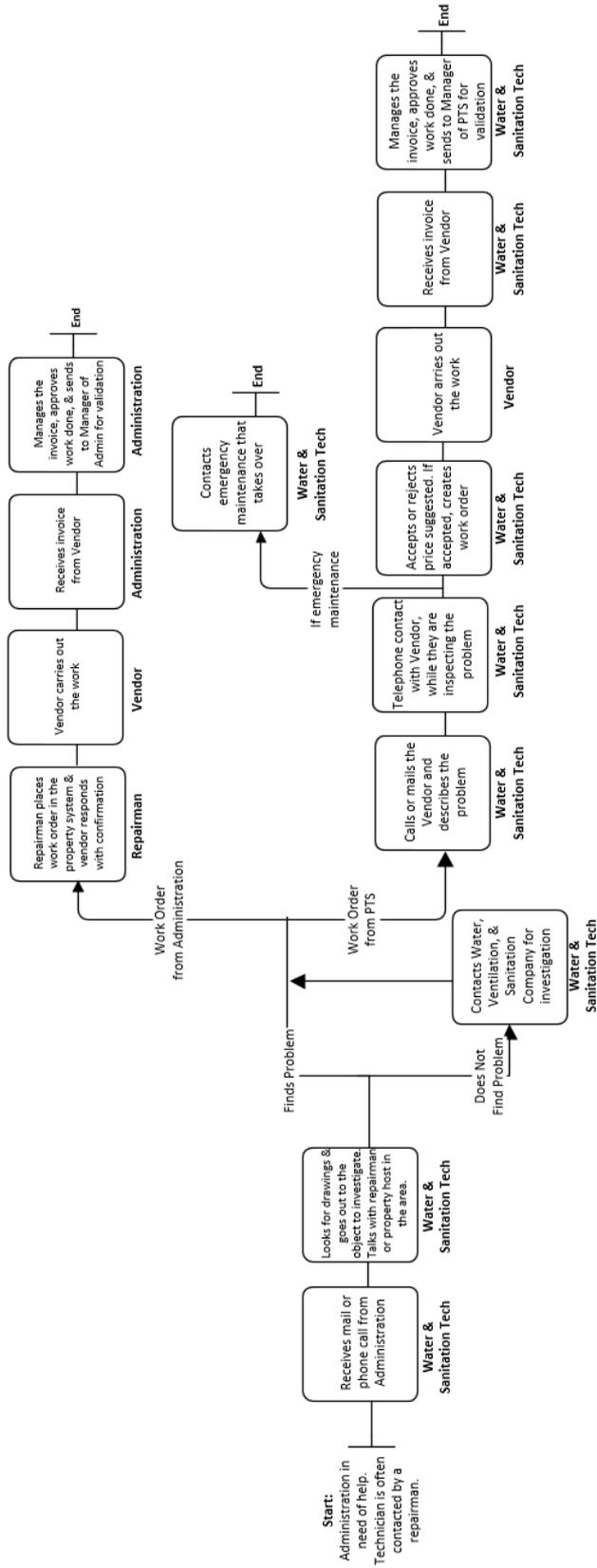


# Planned Maintenance





## Errands from Administration



# Cooling Devices

