



**LAUREA**  
UNIVERSITY OF APPLIED SCIENCES

*Prime Mover*

# The Impact of Management Negligence on Inventory Results

---

Lehesjoki, Tomi

2013 Leppävaara

Laurea University of Applied Sciences  
Leppävaara

The Impact of Management Negligence on  
Inventory Results  
Case: Company X

Tomi Lehesjoki  
Degree Programme in Business  
Administration  
Bachelor's Thesis  
May, 2013

Lehesjoki, Tomi

**The Impact of Management Negligence on Inventory Results**

Year	2013	Pages	38
------	------	-------	----

---

This thesis was commissioned by Company X to investigate the problem areas in the company resulting in redundant inventory differences. This thesis examines a number of store-related processes and managerial duties in order to explain how minor deficiencies may prove problematic and engender major differences in monetary terms. These findings should help the management of the company to determine which processes need specific improvements in the future. The ultimate purpose of such activity is to minimise financial loss by enhancing the operational functionality.

The research started by studying theory relating to inventory management. This granted the author a conceptual understanding of how processes should operate in practice. Participating in a separate inventory project alongside the research process also helped the author to determine which processes which to observe during the period of empirical data collection.

After studying the theory, a total of seven inventories were visited in which observations based on logical assumptions and axioms were performed. Interviews were conducted with district managers, store managers and employees with the intention of establishing a truthful description on how processes are managed in reality. A number of predefined quantitative measures were also performed.

The research indicated that both managerial incompetence and voluntarily neglecting specific duties had an impact on the inventory management. Differences in the final inventory results were always outcomes of multiple tasks being neglected or conducted improperly. Lack of organization during an inventory, for instance, seemed to lower the level of motivation of employees. The level of theoretical knowledge among the employees also proved insufficient. All of the mentioned phenomena prevent the stores from acquiring stable and satisfactory inventory results.

The significance of the findings is that Company X is now more aware of the functionality of their store processes. Methods for improvement in the focus areas can now be executed and as a result significant cost savings can be made in the future.

Keywords    management, leadership, inventory result, daily processes, team work

Tomi Lehesjoki

### Toiminnan Johtamisen Laiminlyönnin Vaikutus Inventaariotulokseen

Vuosi 2013 Sivumäärä 38

---

Tämä opinnäytetyö tarkastelee Yhtiö X:n myymälätason niitä toiminnan alueita, joista heikot inventaariotulokset johtuvat. Selkeimmät prosessit käydään läpi pääpiirteittäin, minkä tarkoituksena on osoittaa, miten niihin kohdistuva puutteellinen toiminta osoittautuu ongelmalliseksi luoden luultua suurempaa inventaariohävikkiä eli rahallista tappiota. Näiden havaintojen perusteella Yhtiö X:n tulisi pystyä kohdistetusti luomaan parannusmenetelmiä eri prosessien osalta, tavoitteenaan yksinkertaisesti erilaisten hävikkien minimointi ja operatiivisen toiminnallisuuden tehostaminen.

Tekijä aloitti tutkimuksensa opiskelemalla inventaarioihin liittyvää teoriaa. Tämä mahdollisti sen, että erilaisten prosessien käsitteellisyys sisäistettiin, jonka jälkeen oli tehokkaampaa tehdä havaintoja eri inventaarioissa. Tekijä osallistui myös inventaario intensiiviseen projektiin, jonka jälkeen erilaiset tutkimuskohteet varmistuivat. Teorian opiskelun ja konkreettisten havaintojen avulla pystyttiin määrittämään yhtiön heikoimmat toiminnalliset kohteet.

Teorian opiskelun jälkeen tekijä vieraili yhteensä seitsemässä inventaariossa, joissa tehtiin lukuisia havaintoja - niin loogisten oletusten kuin aksioomien perusteella. Haastatteluja tehtiin kaikille myymälöiden toimihenkilöille myyjistä aluepäälliköihin asti. Näiden haastatteluiden tarkoituksena oli saada todenmukainen kuva siitä, miten eri prosesseja noudatetaan myymälöissä. Ennalta määritetyistä kysymyksistä koostuva kvantitatiivinen tutkimus oli myös olennainen osa empiiristä tutkimusta myymälävierailuiden aikana.

Tutkimus osoitti, että niin vaillinainen toiminnan johtaminen kuin omaehtoinen prosessien laiminlyönti molemmat vaikuttavat inventaariotulokseen negatiivisella tavalla. Useiden prosessien pienimuotoinen laiminlyönti pitkällä aikavälillä kasaantuu lopulta inventaarioheitoksi. Heikosti organisoitu inventaariolaskenta esimerkiksi heikensi laskijoiden motivaatiota. Teoreettisen tietämyksen taso osoittautui myös luultua heikommaksi. Nämä ja monet muut esimerkit estävät myymälöitä pääsemästä inventaariotavoitteisiinsa.

Tutkimuksen havaintojen suoma etu on se, että Yhtiö X on nyt tietoisempi myymälöidensä toiminnallisuudestaan. Erinäisiä parannusmetodeja pystytään nyt keskitetysti kohdistamaan niihin osa-alueihin, joista inventaarioheittoja syntyy. Tämä opinnäytetyö havainnollistaa pienten asioiden merkityksen, mitä Yhtiö X:n toiminnallisen mittakaavan laajuuden ohessa monen on vaikea käsittää.

Avainsanat toiminnan johtaminen, johtajuus, inventaariotulos, päivittäiset toiminnot, tiimityö

## Table of Contents

1	Introduction .....	6
1.1	Purpose of the thesis .....	6
1.2	Research problem .....	7
1.3	Research approach .....	7
1.4	Theoretical approach .....	7
1.5	Framework of the thesis .....	8
2	Theoretical background .....	8
2.1	Characteristics of a good leader .....	9
2.1.1	Communication .....	9
2.1.2	Motivation .....	10
2.2	Perceptions concerning leadership .....	11
2.3	Analytical leadership .....	11
2.3.1	Phases of work .....	12
2.4	Information system management .....	14
2.5	Summary of the theoretical discussion .....	14
2.6	Theoretical framework .....	15
3	Research approach .....	16
3.1	Methodology .....	16
3.2	Validity & Reliability .....	17
4	Empirical study with conclusions and recommendations .....	18
4.1	Management issues .....	18
4.1.1	The core ideology .....	19
4.2	SWOT-analysis .....	20
4.3	Daily processes .....	21
4.3.1	Write-offs .....	21
4.3.2	Thefts and cashier errors .....	23
4.3.3	Tobacco products .....	26
4.4	The four phases of an inventory .....	27
4.4.1	Preparations for an inventory .....	28
4.4.2	Inventory meeting .....	30
4.4.3	Inventory count & input .....	31
4.4.4	Plausibility check .....	34
4.5	Information accessibility .....	34
5	Summary with commentary .....	35
5.1	Theoretical linkage .....	36
	References .....	37
	Figures .....	38

## 1 Introduction

Company X is a grocery store chain operating in the Finnish market. Like any other form of business, the company conducts inventories with the intention of receiving an overall perception of the company's functionality. The main purpose of an inventory is to determine the current liquidity and assets of a company during a specific period of time. Inventories help companies to determine the sources of losses and thus improve their operations with the intention of achieving higher profits.

In an ideal situation no goods would get lost or stolen due to various reasons. This would abolish the need to produce inventories. In reality, businesses have a tendency of producing improper results. An inventory analysis executed by the administration points out the weaknesses a company has under its operations: Why do certain products have significant inventory losses? Why is Company X missing vast amounts of products that are kept in a locked safe? Such problems may sound minor, but when the same occurs in ten or fifty different stores, the derived monetary loss rapidly increases to an unwanted level on a company scale. This is exactly the case with Company X.

As suggested above, inventory results do not just inform how many products or goods are missing - they act as an informative tool for further development. A brief analysis with the figures promptly tells an experienced manager the most probable reasons of an occurred loss. A tomato may be weighted and sold with an incorrect code instantly resulting in an inventory deficit. The case may be that the same tomato has not been noted down in the write-offs. Products may have fallen to the ground and being tossed straight to the bin. Whatever the reason, a certain amount of money is lost in each case.

All of the previous are very basic examples of events taking place in Company X's everyday store routines. Human errors are evident but due to the nature of their being they are very hard to avoid. Therefore they are considered insignificant and are not investigated as a separate issue.

### 1.1 Purpose of the thesis

The purpose of this thesis is to help Company X acquire better inventory results by presenting the current situation with processes from which inventory differences accumulate. The intention is that Company X has an overall view that helps it to determine the future actions designated to improve the inventory results.

## 1.2 Research problem

As the introduction suggests, inventory results function as valuable tools for determining the problematic areas a company has under its operations. Having dissatisfactory results indicates that the company's internal money flow is distorted. Company X sets specific inventory result targets for each store. Unfortunately, a notable amount of stores are having abiding difficulties of accomplishing these requirements. This is the reason why the author was assigned to investigate the reasons resulting in inventory differences.

It is obvious that the problem exists in many different parts of the company's operations. This thesis focuses only on the store level operations due to the fact that Company X has already developed their warehouse logistics and the effects of these improvements are being monitored.

## 1.3 Research approach

Since this thesis is based on a case study conducted alongside a job placement period with Company X, the author has had the possibility to access the company's internal information network and other supporting databases. Therefore the research approach of this thesis is a mixture of both logical and theoretical research supported by qualitative and observational research. The author also has several years of working experience with the company on a store level, providing him with tacit knowledge on the weaknesses Company X has. This enabled the author to proactively select specific problem areas which to investigate. A set of axioms were also discussed with the author's superiors before the empirical study, helping the author to determine the research targets.

## 1.4 Theoretical approach

The theoretical part of this thesis focuses on management issues and how different methods and characteristics of leadership affect the outcome of either individual work or team work. Understanding how minor errors and misconducts result in unwanted figures (inventory differences) acts as the core message in the thesis. Behind all the complexities are the different levels of management. This is the main reason why the author chose to investigate theories relating and supporting management. In addition, these topics suited this case study format the best and provided a simple, yet effective approach for the development ideas.

## 1.5 Framework of the thesis

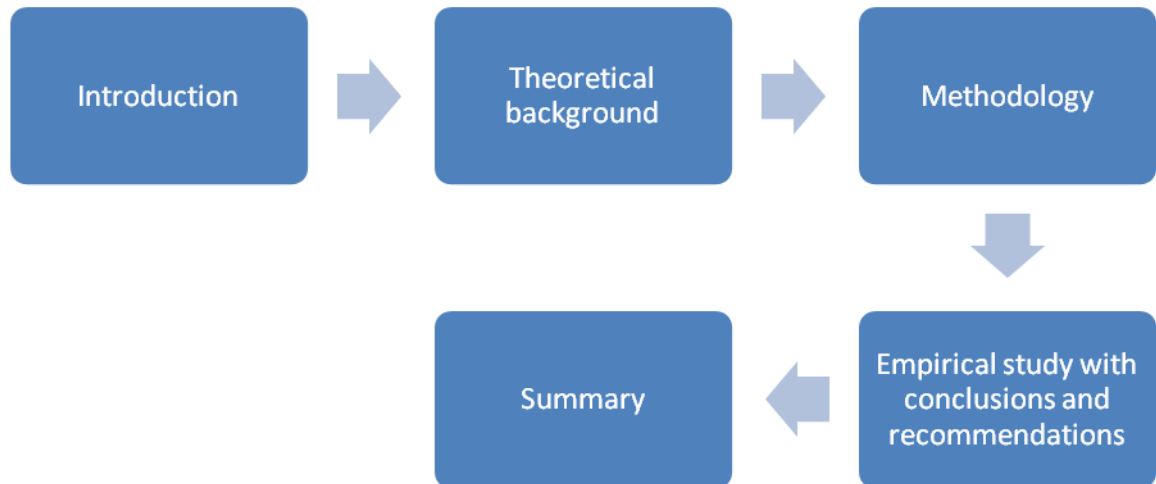


Figure 1: Thesis framework

This thesis follows a relatively simple framework with introduction at the beginning followed by a theory part. Brief notifications are made in the theory part explicating the affiliation with store operations. The methodology section elucidates in detail how the actual research was conducted, explaining the different development phases of the case study.

The empirical study section is combined with conclusions and recommendations. The reason for this is that the reader has a clearer understanding of the problem. Management issues are explained at the beginning of this chapter due to the reason that they affect every process in the stores. A SWOT-analysis is also included for a more extensive view on the company operations. In the summary part, the author condenses the essential findings into broad development ideologies.

## 2 Theoretical background

The theoretical part of this thesis imparts the reader in a narrative way how certain processes and related issues should be conducted in an ideal situation. These theory chapters do not straightly refer to any particular process but provide a profound base for understanding the issues presented in chapter four (4), 'Empirical study with conclusions and recommendations'. The chapters are accompanied with brief references that clarify the theoretical linkage to Company X's processes and functions.



## 2.1 Characteristics of a good leader

The district managers (DM) are responsible for the inventory results within their stores. An unsatisfactory result always (excluding the logistics effect) stems from numerous processes and managerial duties being neglected. Proper leadership is the fundamental gestalt when targeting for desirable inventory results.

Parkkonen (2000, 6-7) states that a good leader must have an ability to listen to employees, receive visionary approval from them and make sacrifices in order to reach goals. Placing the needs of other people ahead of own needs for a while is not hard, especially if this leads to a desired outcome. The trick is to harness and exploit these skills regularly for the purpose of developing coherent leadership.

Järvinen (2001, 27) suggests that proper leadership consists of the ability to value one's leadership. A strong will to operate as a leader is also required. These two main issues are enabled with the help of self-criticality and a strong self-esteem. Maxwell (1998, 175) adds that a leader can never encounter a situation in which prioritization is not required. Whether leading a small business or a group, prioritizing resources is something that successful leader perform.

Prioritization on a store level is essential when targeting for process improvements. The author suggests that instead of applying five different development plans simultaneously, the stores should concentrate on improving one process at a time.

### 2.1.1 Communication

The ability to communicate and deliver messages with exact meanings is a vital for any leader. Expressing thoughts and ideas insufficiently costs time and resources. The credibility of a leader also suffers when unclear communication occurs. Losing one's face may result in a situation in which the employees are no longer obedient due to skepticism. Communication also acts as a bidirectional tool - meaning that employees have a possibility to express their needs and possible development ideas. Valuable feedback is therefore received. (Curry n.d.)

Argyris (1994, 88) states that workers must provide better work if businesses are to flourish and survive in the 21st century environment. This does not refer to harder work but taking more active responsibility for behavior. Tough competition requires major commitment from every employee. This can be attained through better communication.

Credible district manager communication is achieved through flawless theoretical knowledge. This way the employees are more likely to provide more competent work, decreasing the amount inventory losses.

Company X has a constant inflow of information from head office to the stores regarding upgrades in processes, for instance. The proper deployment of these new features stipulates flawless communication. Chapter 5.7, 'Information accessibility', investigates the current situation and to what extent Company X employees have an access to important information sources.

### 2.1.2 Motivation

Motivation refers to the level of passion included in work. The need for money, power and dignity do not entirely characterize motivation. The propensity of reaching one's goals persistently and energetically also portrays motivation. Unfortunately in working life, many people only work with the next paycheck on their mind. A distorted need for subsistence contorts individual values so that people often feel very bored at work. More precisely, their work has lost its meaning. Truly motivated people reach goals beyond expectations. (Parkkonen 2000, 18)

Curry (no date) suggests that employees usually turn stagnant when motivation decreases. Recovering from such situation can be dealt with two different styles. First one, the more traditional approach, is to motivate employees with fear. This is anything but rational since it only results in short-term benefits and depending on the subject the situation may even evolve into being more unstable.

The second alternative suggests that employees should be presented with challenges. The excitement arising from the novel challenges not only increases motivation but acts as an encouragement for being more creative. Halpern & Lubar (2005) add that the reception of empathy from one's leader also increases motivation and level of commitment.

The level of commitment is comparable to the quality and precision of work conducted by an individual employee. This applies to every process within Company X's stores.

## 2.2 Perceptions concerning leadership

The majority of people associate leadership with control. Control is power to lead and has nothing to do with leading. (Parkkonen 2000, 9) However, Järvinen (2001, 27) insists that operating as a leader necessitates the use of control, which is closely related to parenthood. Both being a leader and a parent requires the setting of functional limitations and demands. Especially in working places a leader should intervene to the behaviour of employees, if needed.

Järvinen (2001, 27-28) explains that our society is troubled with an authority problem. The main reason for this originates from the cultural change towards authorities. Over the past few decades, the western societies have tried to secede from authoritarian behaviour. The concepts 'authority' and 'authoritarian' are widely mixed, resulting in situations in which leaders avoid the ideology of acting as an authority to one's subordinates. This explains why being a 'nice guy' is more favorable than a traditional authority among modern leaders.

The opportunity for an employee to participate in the development of a working place has substantially improved. Democratic decisions have gained prestige and the regulatory organization structures have mostly been disembodied and lightened by developing team-centralized organisations. Work is nowadays mostly occupational specialization, meaning that in many cases the subordinates are more aware of the content and methods of work than their leaders. This has led to a situation in which controlling leadership ascending from higher levels of hierarchy no longer serves the mutual interests effectively. The problem is how to lead experts who want to work independently. A leader is always needed to ensure that common objectives are achieved. (Järvinen 2001, 28)

Company X district managers are responsible for setting certain requirements in the stores on a weekly basis, such as write-off targets. Ensuring that all processes in the stores are properly managed is an ultimate requirement, yet implementing this may prove impossible since resources and time is limited.

## 2.3 Analytical leadership

Davenport, Harris & Morison (2010, 58) explain that all analytical leaders possess some common traits. Having proper people skills is the first one. A person may be analytical with data and computers but still lack the ability to emphasize with others. Such leaders are incapable of achieving the desired outcome. Analytical leaders also tend to disqualify intuitive recommendations from subordinates. (See chapter 6.4) Using intuition as a primary decision making tool disorientates people rapidly from fact based decisions and therefore enervates the basis

of future improvements. Maxwell (1998, 77) argues that "intuition is based on facts plus instinct and other intangible factors".

The provision of analytical business perspectives may occur via direct teaching or guidance into punctual thinking. The operational capabilities among employees may improve as a result. The best form of teaching often results in a situation in which people do not realize that they were educated. (Davenport et al. 2010, 60)

Analytical leaders must also show persistency and act as a foundation for establishing an analytical ecosystem. Business processes or cultures do not change overnight. It is necessary for leaders to persistently revise and change their analytical approaches, if needed. In an ideal environment, the burden of leadership and producing analytic decisions would be divided with other leaders and employees. Therefore leadership derives from "a network of analytical leaders across organizations" instead of individuals. (Davenport et al. 2010, 61)

An ideal Company X district manager has both the knowledge and the ability to execute analytical decisions based on the information provided by various mediums.

### 2.3.1 Phases of work

According to Spiik (2004, 82) quality team work entails both mutual understanding and knowledge how to function as a team. Thorough planning is an important principle which enables the team to complete half of any given task beforehand. A clear cadre of needs and ideas enhances the performance of employees and also acts as a guideline on how to conduct tasks properly. Sufficient amount of discussion saves time, inconvenience and money.

In a planning phase the team members are not required to agree on every aspect. After the discussion phase is finished and collective decisions have been reached, any sort of disagreements should no longer occur. This similar phenomenon exists in every team sport. A single player should always stick to the game plan, though he/she may disapprove, enabling the other players to know how this particular player is performing. Every successful team has a proper group discipline. (Spiik 2004, 83-84)

Spiik (2004, 83) illustrates the three phases of work in the figure below:



Figure 2: Phases of working

The discussion phase acts as a foundation for any efficient work. A team that has not undergone a discussion may still consist of diligent workers who execute tasks with amiable efficiency. In such case the assets are not targeted for the same purpose. This not only costs time but resources too. On the contrary, a team that has a discussion beforehand the action phase is likely to produce more efficient work with less time spent. A clear understanding of common goals and the opportunity for an open conversation are the two key factors for a strong team spirit. (Spiik 2004, 84)

The quality of team work strongly reflects how well daily routines are managed overall. Particularly during an inventory meeting (undertaken very few stores), reviewing the process thoroughly has been proven worthy. Conscious people tend to count more accurately resulting in fewer mistakes, as an example. The pros and cons of an inventory meeting are explained in chapter 6.3.

Company X strives for efficiency especially at the store level. The author believes that the stores can be referred to being ‘High Performance Organizations’ (HPO), which Jeston & Nelis (2008, 11) define as: ‘an organization that achieves results that are better than those of its peer group over a longer period of time, by being able to adapt well to changes and react to these quickly, by managing for the long term, by setting up an integrated and aligned management structure, by continuously improving its core capabilities, and by truly treating the employees as its main asset.’

The improvement of core capabilities is not a concern of the DMs. Otherwise, the definition of HPO should act as a motto for each and every DM with a foremost emphasis on treating employees as their main assets.

## 2.4 Information system management

“An information system (IS) can be defined technically as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making, coordination, and control in an organization. In addition, information systems may also help managers and workers analyze problems”. (Laudon & Laudon 2011, 37)

The performance rate of a business is contrastable to the know-how of its employees. The exact same applies with the use of information systems - they are worthless without skilled people present filtering the valuable information and effectuating it into practice in order to achieve business objectives. Businesses seek means of improving their efficiency when targeting higher profitability. Information systems enable information to flow swiftly between different management levels as they operate as an essential medium for managers who utilize them in order to achieve higher efficiency and productivity. These systems consist of data that people transmute into valuable information via analysis. (Laudon et al. 2011, 34, 37, 40, 68)

Managers often struggle with situations in which they are not certain on how information should be used when making informed decisions. Instead, decisions rely on guesses and concise forecasts. This usually results in misallocation of resources and partial measures that are followed by unplanned costs. Achieving an improved decision making tool in any part of a company's business operations can be regarded as a competitive advantage. Profitability increases when certain processes no longer claim the same amount of resources, for instance. (Laudon et al. 2011, 36)

## 2.5 Summary of the theoretical discussion

As the theoretical section implies, leadership is an essential part of Company X's operations. Management issues deriving from improper leadership are the starting point for basically any weaknesses inside the company. There is an ample gap between the theoretical and practical occurrence of process management. Any process, simple or demanding, will fail unless it is properly managed or supervised.

The desired outcome of the theoretical section is to provide a clear vision for the reader on the importance of having good leadership skills. What is required from a leader? How to motivate employees? Where to find information? A combination of the positive characteristics results in a situation in which work can be coordinated with utmost efficiency and accuracy.

The ‘different phases of work’ and ‘analytical leadership’ chapters act as the two most important supporting concepts for management with Company X. The ability to organize work and digest information from available sources is relevant. These two skills separate the great leaders from the good ones, though depending on the store, are not always required to maintain propitious inventory levels.

The ultimate purpose of the whole theoretical section is to provide information for the reader and act as a tool for personal development, for instance. However, these theories should always be put into practice via thorough adjustments.

## 2.6 Theoretical framework



Figure 3: Theoretical Framework

The unsatisfactory inventory results with Company X are a result of partially managed processes. The theoretical framework above expresses the four concepts important in obtaining pleasing inventory results. The core concept, leadership, acts as a combining medium amid the four supporting factors. Without proper leadership none of these four concepts can operate with 100% efficiency.

The ‘leadership’-based chapters explain the important characteristics that every Company X district manager should have. With the help of these features, the author expresses the relevance of how much easier it is for a DM to achieve better results with inventories if the subordinates see the DM as a true leader who can be trusted upon. These chapters act more as guidance tools rather than referring to any theoretical analysis.

The 'Phases of work'-part correlates straight to chapter 4.6.2, 'Inventory meeting'. The idea is to explain how relatively simple tasks (inventory count) can be performed inefficiently and with invalid measurements if the planning phase occurs without forethought or does not exist at all.

Chapter 2.4, 'Information system management', simply refers to the importance of making analytical decisions with the help of key figures.

### 3 Research approach

A research can be conducted by using different research methods. These methods can be either qualitative or quantitative. Other types of approaches are such as case studies, which can be prospective or retrospective, for instance. This thesis was mainly a case study in which the data gathering did not only consist of either quantitative or qualitative research methods. A mixture of these two was necessary due to the nature of the case study. The observations were based on logical assumptions supported by vast theoretical background knowledge. However, as the empirical study proceeded, new points of interest were determined in order to broaden the perspective of the study.

#### 3.1 Methodology

The job placement started with a pedantic study (revision) of theory related to inventorial operations provided by the sales department of Company X. After assimilating the theory, the author participated in an inventory intensive project. A team of six persons (either district managers or project coordinators) spent a week in a specific store monitoring and observing all the processes from which inventory losses could occur. In addition, two inventories were conducted and results compared to discover whether the minor changes committed in between had an effect.

Participating in the intensive inventory project helped the author to apprehend the importance of certain processes from which inventory losses derive. Before the project, the author had already developed tacit knowledge on the same causalities during the six-year period spent working in stores for Company X. The project's outcome assisted to define which processes were to be paid special attention to later on in the field work part of data gathering.



After the inventory intensive project the author spent four days along with two colleagues analyzing the results and data obtained. The analysis consisted mostly of in-depth figure analysis - investigating every difference of +-5€ and above using the data provided by the administration. This thesis does not examine such detailed information due to its nature of complexity.

The author attended a total of seven inventories (in addition to the two held during the intensive project), all conducted in different stores with different district managers. The DMs are responsible for five stores on average, meaning that coverage of 35 stores was established (DMs conduct fairly similar inventories in each of their stores). The 35 stores is an adequate amount regarding Company X's operational scale and validated to portray the company's operations.

The data gathering part continued throughout the three month period mostly in the form of asking questions related to the subject concerned. The questions presented supported either pre-defined quantitative measurements or qualitative entireties. The qualitative questions were presented to Company X district managers, store managers and other higher level officials. The findings were then discussed with a more experienced colleague (usually an expert related to the matter) in order to attain a reliable conclusion.

### 3.2 Validity & Reliability

The research question of this thesis is associated with finding the reasons resulting in inventory losses. The level of validity and reliability both can be interpreted differently depending on the reader. Some may agree that author used correct research methods, some totally disagree (store vs. warehouse logistics). The interviews performed are always biased by the correspondence of the interviewee, especially in this case where the interviewer represented the same company. An assumption is made that some people may have garbled the truth in order to enhance the image of the store, for instance. Therefore the data gathered is unreliable to some extent.

The author's beforehand tacit knowledge was the major reason why these particular research methods were used. During the intensive project, the author grew to understand the importance of other factors as well. This resulted in empirical observations from which valuable information was gathered. Other researchers could have used different approaches or methods but since the author was given relatively free hands on the project, the level of validity is hard to define. Anyhow the author's background tacit knowledge gave a basis for setting the proper research targets for the project. These targets were approved by the sales department of Company X before the actual field work data gathering resumed.

## 4 Empirical study with conclusions and recommendations

This chapter introduces the management issues and key store processes from which redundant inventory losses accumulate. Their basic functionality is first explained after which the findings are presented. They are followed by development ideas and recommendations. The processes are described in detail to help the reader assimilate the exact point in the processes from which problems arise. A more detailed introduction of Company X is not required since the issues are presented in detail, providing a sufficient amount of information for the reader.

### 4.1 Management issues

A district manager acts as a cornerstone for the proper functionality of any process conducted in a store. If the DM lacks theoretical knowledge on how to perform an inventory or undervalues the effect of several processes causing inventory losses, improvement of any kind stands at status quo. The starting point for improving the inventory results should be the DM's strong will to achieve better results supported by knowledge on how to operate. The second requirement is the ability to digest data from designated sources and compound the information to practice via analytical decision making.

The author felt that every DM interviewed gave a truthful answer to each question presented. This may be a result of them not understanding the severe causalities between process negligence and inventory losses. Another reasonable explanation for their sincerity could be some form of arrogance or pride inducing immunity towards any external improvement methods. In either case the inventory result of a store will most likely remain stagnant and not improve. However the stores with good results throughout the fiscal year do not want any changes. The results prove that their processes are managed properly and the ideal situation for them is to remain invariable. The DMs of pleasing inventory stores should prepare an in-depth presentation on how to perform a decent inventory. Not only Company X results would improve but its operations would become more homogenous.

Nearly every district manager accused the logistics for causing bad inventory results. An absolute calculation for the inventory result received from the inventory project's analysis indicated that the logistics accounted for a 42% share of the total loss. Again, different warehouses operate with diverse accuracy and the remaining 58% share (excluding the 5% cashier & thefts loss) was a result of store based operations. The district managers should forget about the warehouses' dysfunctional operations and concentrate only on achieving a 100% accurate and valid result from their own stores.

The district managers are to be made aware of the severity of minor issues accumulating as unacceptable figures. The DMs should maintain an abiding trust with the store managers who are responsible of managing the stores alongside with the defective processes. Faulty ideology with proper workforce is of no good and vice versa - the perfect ideology cannot be implemented if there is no one to perform proper work.

The management should bring forth the causalities causing losses and induce the employees to work more precisely with the help of a development plan, for instance. All the specific problem areas and improvement ideas are discussed in more detail in the latter chapters.

#### 4.1.1 The core ideology

The author believes that Company X's process guidelines are mainly clear and functional. They are available to everyone in the stores and therefore should not induce situations in which nobody would know how to operate. However these guidelines are not followed entirely - starting from the orders given by the district managers. This means that the store managers, being responsible for their stores in a practical aspect, may cultivate an operational entity of their own by modifying the process guidelines. A perfect proof of such phenomenon taking place is the fact that all of the seven inventories had clear differences. The preparations took from a couple of hours to four days. The inventory count was either rushed through or performed with utmost attention. Some inventories had the DM present, some not (ultimate requirement). How can seven different stores operating under same rules differ so much from one another?

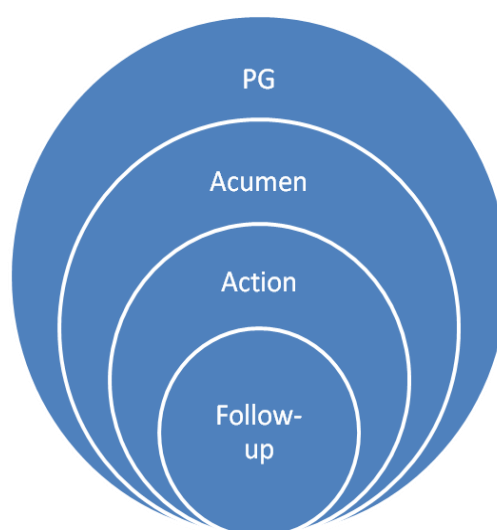


Figure 4: Operational ideology

Figure 4 is a recapitulation of the operational ideology associated with all the processes in a store. The process guidelines (PG) should be the linchpin concept for everyone to follow. A mutual acumen of how to convert them into practice is followed by action in the form of work. The follow-up is either conducted by the district managers or store managers (the duty managers also play an important role both in assimilating the concepts as well as superintendents for the employees).

The alteration of process guidelines is apprehensible to some extent in special stores but on a company scale it hinders the supervision of these processes. Developing these processes becomes very challenging since the results obtained are not based on any common grounds throughout the company. The DMs are responsible for the stores and should act as the sole providers of ideology on how to work by ensuring that process guidelines are obeyed. This is the starting point for any development.

#### 4.2 SWOT-analysis

The SWOT-analysis was perpetrated in order to provide an overall view of the current situation with Company X's inventory processes, including aspects from both the inventories and normal daily processes. Most of the points presented are compressed into a single phrase though they represent a compendium of several issues that require further actions. This SWOT-analysis represents the author's subjective view in a conclusive manner. The analysis was first presented to one colleague who acted as a 'mentor' for the author throughout the job placement period. Each point was carefully reviewed and approved. After the approval, the SWOT was reviewed with Company X's head of sales department. A joint agreement was carried out that these really were our weak spots and that the company would conduct minor separate projects in the near future each emphasizing on specific problem areas.

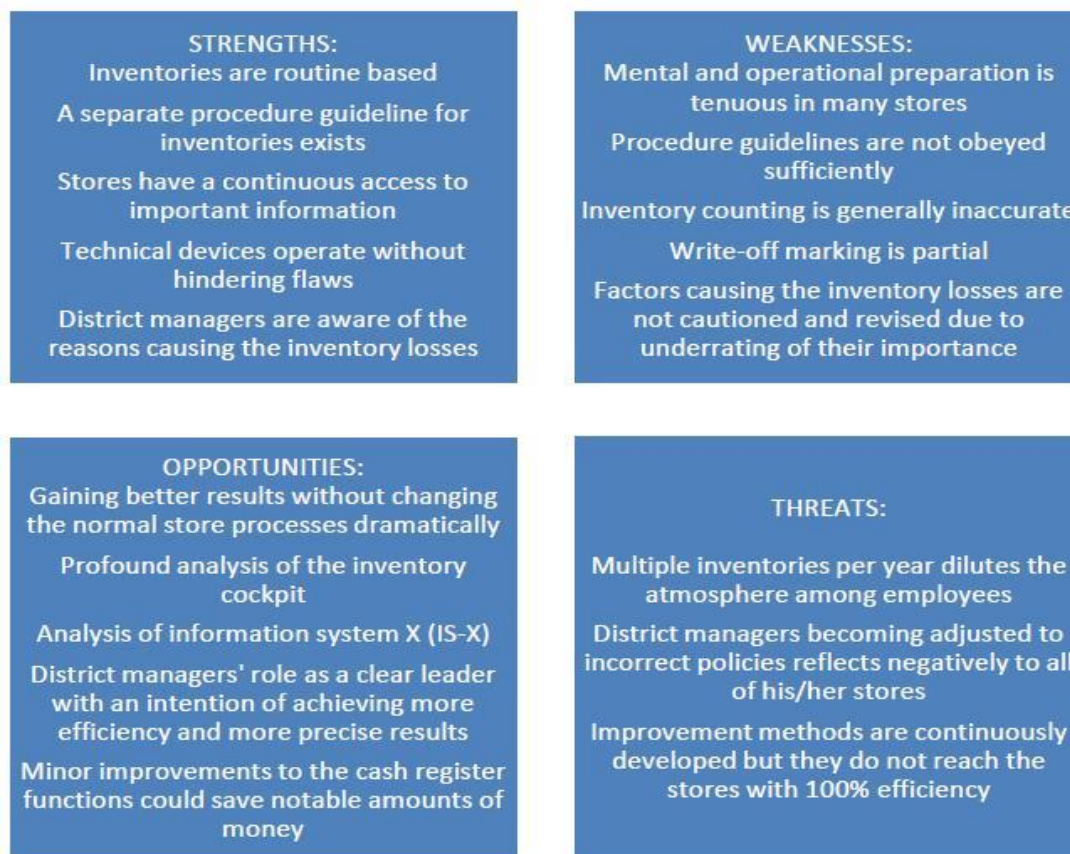


Figure 5: SWOT-analysis for Company X's inventory based processes

The following chapters enlarge the central aspects presented in the SWOT-analysis. Practical examples are briefly introduced in order to avail the apparent problematic issues Company X is struggling with.

### 4.3 Daily processes

The following three sub-chapters describe the main problematic areas with Company X stores. There are other interesting factors in the stores influencing the inventory results but the author decided to investigate the following three since a mutual decision was agreed that these particular areas have problems.

#### 4.3.1 Write-offs

Products that are no longer vendible due to specific reasons should immediately be removed away from customers and taken to a designated place in the storage. This is a relatively simple process without many risks. Still, a few steps conducted improperly may wreak havoc.

Firstly, when a person detects a faulty product it should be taken straight to the place where write-offs are marked. The basic principle is that no product should be tossed to the bin without marking it as a write-off. Secondly, whenever write-offs are marked, they should be removed from the store premises. Leaving marked products next to the unmarked products may lead to a situation in which an employee presumes that all the products are marked after which he/she throws everything to the bin. The unmarked products thus generate an inventory loss.

The actual phase of marking the write-offs comprises three risks: miscalculation, delinquency of counting every product and the improper estimation of imbalanced products. As an example, two boxes of chocolate bars may well be noted down as 43 pieces instead of the correct amount of 44 pieces. The person marking the write-offs may also neglect the task by skipping a few products on purpose. These two examples do cause inventorial differences but the major issue concerning Company X's write offs relates to the marking of imbalanced products, which are charged by their exact weight. Such products are to be weighted with the help of a scale. Otherwise the estimated weight will certainly diverge from the correct weight and cause the accessory weight to result in either an inventorial loss or a surplus.

The following figure demonstrates the differences between the seven stores in terms of how certain write-off related processes are managed.

	Store						
	A	B	C	D	E	F	G
Scale used when marking imbalanced product write-offs	X	X	X	X	X	X	X
Write-off area in accordance with process guideline	X	X		X	X		
Imbalanced products (meat) weighted in an inventory	X	X		X	X	X	
F&V write-offs marked in accordance with process guideline							

Figure 6: Write-offs

All the seven store managers claimed to having emphasized to every employee the importance of using a scale when marking the write-offs. This is an important matter since it is impossible to acquire results even close to reality when estimating the weights manually. Ensuring that both current and new employees are properly trained to manage the write-offs is an essential part in avoiding inventory losses deriving from this sector of daily processes.

Four out of seven stores had their write-off area organized. The requirements are that the area is in the right location, tidy and has a clear distinction between the marked and unmarked products (marked products preferably either in the trash bins or close to the back door).

The imbalanced meat products were not weighted in two of the inventories visited. They were counted in pieces to a balance sheet after which an estimate of product's weight was used to calculate the value of the stock. Such an event is not a major mistake but definitely alters the real result. This case was perfect evidence how some district managers neglect the basic processes and alter the results on purpose, believing that small changes here and there will not affect the overall result radically. The author believes that only a minority of the DMs apprehend the effect of small delinquencies accumulating into major losses.

None of the stores marked their morning fruit and vegetable (F&V) write-offs in accordance with the process guideline, meaning that the marking should be conducted at the F&V area - not in the storage after unloading the delivery. The only benefit of operating in such way is that the risk of confusing marked products with unmarked products would become impossible since the unmarked products would not be stored anywhere in the store premises.

#### 4.3.2 Thefts and cashier errors

Thievery is a worldwide problem with all types of businesses. Every time a product is stolen the same amount of money the product is worth ends up as an inventory loss. Finland is not considered as a country with serious criminal activity, yet thievery is ubiquitous to some extent. In some of the Company X stores, the same 'faces' are seen stealing many times a week. (Store manager X 2013)

The author believes that a common delusion of not understanding how much stealing affects the inventory results is apparent among district managers. At the same time, it is obvious for everyone that fractional resources prevent the store employees from monitoring all sorts of suspicious activities. However many basic processes, when performed in an orthodox manner, can prevent thievery efficiently, such as inspecting the shopping carts before they pass the cash register in case someone would be hiding products.

Another very interesting fact is the actual amount of internal stealing. In European retail industry around 30% of the total thievery is committed by employees themselves. (Taloussanomat 2010) This is an issue with complexity: How to monitor employees who simultaneously are to be entrusted? The author does not state that Company X employees are thieves. On the contrary, the working environment should function in a way in which stealing would be made impossible.

Cash register represents the final stage of a product's life cycle from the store's point of view. After a product is purchased it no longer concerns the store, unless it is reclaimed. The actual reclaims include a minor risk of causing inventorial differences but they represent such minor percentage that they are not investigated in this thesis. Anyhow the cash register employees are prone to multiple defaults resulting in monetary loss. A customer may accidentally leave products in a cart unnoticed. The employee at the cash register may scan one product instead of three. Certain products are also registered with the help of specific codes designed to hasten the performance. Mixing those codes is not unusual, especially when a novel employee at subject. All of the examples result in an inventory difference.

A good example of an ongoing problem relates to the purchasing of shopping bags with similar appearance yet different product numbers. Company X has instructed that every shopping bag must be scanned at the cash register instead of using the product number keys to ensure that the correct amount of money is charged (barcode automatically charges the correct price). A single shopping bag may be taken without a notice, stolen, thrown in the bin before marking it as a write-off, accidentally taken etc. Whatever the case, an inventory loss always occurs.

The majority of employees interviewed claimed that they always intend to scan each shopping bag, as instructed. Some admitted to giving away complimentary bags to the customers. The number of people telling the truth is obviously biased, referring to acting against store policies: giving something away for free. In reality, every single employee gives shopping bags away for free occasionally. One district manager (2013) also explicated that: 'A couple of shopping bags here and there do not show up in our inventory results'. The importance of properly charging every shopping bag can be reasoned with a careful estimate: if 30 shopping bags got lost due to any reason each day of the year in every store, the monetary value would climb to hundreds of thousands of Euros - a figure that any company would not approve.

During the inventory project the team conducted nine test trolleys and 11 product number code tests to discover any weaknesses in the functionality of cashiers. The results were as following: Five out of nine test trolleys were incorrect and resulted in a theoretical loss of approx. 35€. The product number code tests had a total of 235 questions of which 48 were incorrect. (80%)



The test trolleys contained unclear mixtures of products, such as two different can of beverages on the same carton. Their lids look exactly the same and are often left unsorted by the cashiers. Some products were placed at the very bottom of the trolley in a place where they are left unseen unless inspected - as advised in the process guideline. Nevertheless none of the items were hidden completely, i.e. inside a breast pocket. This implicates that it is relatively easy to steal products - if 'caught' not much courage is needed to apologize and pay for the products.

The amount of products stolen is hard to determine. Yet the test trolleys conducted imply that Company X has imperfections either in its cash register process or in the cashiers. Whatever the reason, the cashier functions should be taken into investigation in order to minimize the inventory losses caused by thefts or unnecessary mistakes. The author suggests that a three-stage improvement process would enhance punctuality at the cash register operations:

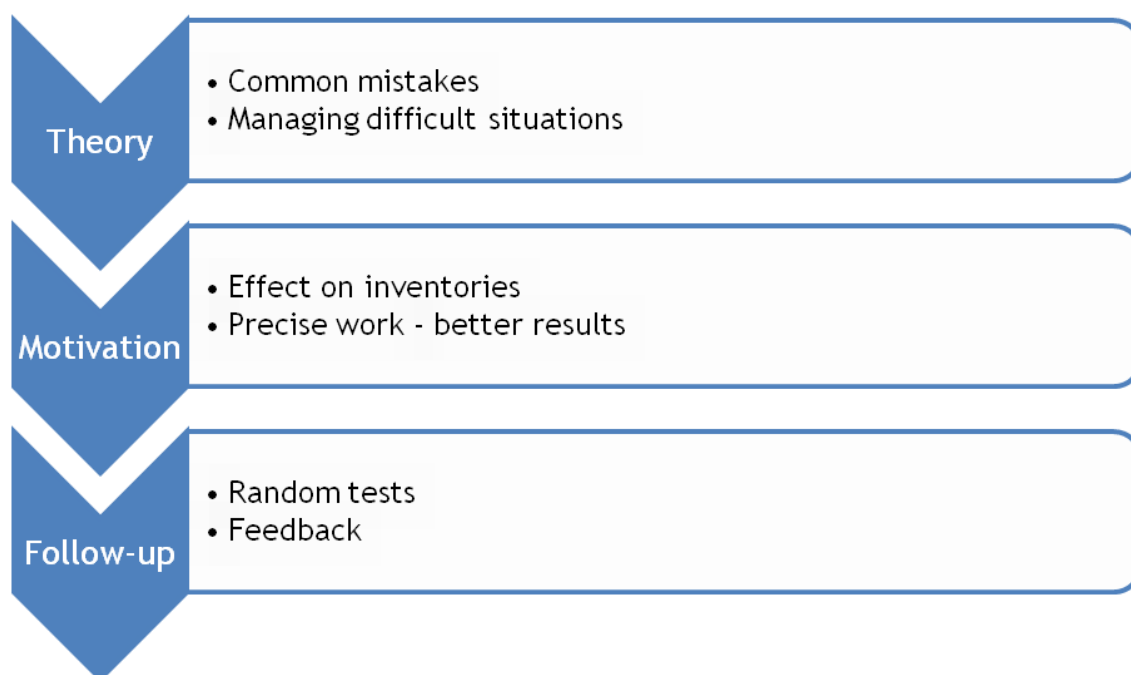


Figure 7: The process of improving cash register operations

Sitting at the cash register for several hours in a day can develop some form of 'blindness', meaning that the level of observation deteriorates. Regardless of the employee's level of competence, cashier errors will most likely occur. The first stage of the development process would consist of simple education regarding the most common cashier errors influencing the inventory results. Therefore the employees would have an understanding on how minor insignificant issues eventually accumulate into major losses. A minor recap on managing difficult situations would also prove advantageous. The challenge emerges from the fact that the em-

employees' job description does not change at all. How to motivate people to work more precisely with company being only party benefitting from the improvements?

The second stage could consist of simple examples showing the importance of accurate work. How much money company loses if everyone donates complimentary shopping bags, how much a case of beer is worth in a year when left unnoticed once a day etc. This would hopefully 'awaken' the employees to understand the severe causalities. The inventory interval and what defines its length could also be explained. None of the employees interviewed claimed to enjoy conducting an inventory. Collective work performed with quality decreases the amount of inventories conducted in a year.

The final and the most challenging stage is the follow-up on how the information has reached the employees. This stage would include product code tests and test trolleys in an interval of approximately six months. Such tests performed too frequently would distract the employees and require inadequate amounts of resources. The challenging part of this stage is how to perform the test trolleys with diplomatic means, meaning that no employee should encounter a situation in which he/she feels inept. A number of employees are members of a labor union. If an employee feels targeted in a negative manner, such situations may result in complicated situations initiating even in lawsuits diluting the company's image.

#### 4.3.3 Tobacco products

Tobacco product derived losses were given a priority for the project. As the following table demonstrates, the tobacco related processes were seriously neglected in a number of stores.

	Store						
	A	B	C	D	E	F	G
Tobacco products properly stored at cash registers							
Tobacco products properly stored in other premises					X		X
Tobacco products properly counted in an inventory							

Table 1: Tobacco products

The tobacco lockers were kept open in every single store visited. This is allowable (with lid down) when an employee is at the cash register but not when the cashier is absent. The lockers were either kept completely open or just unlocked. Such disobedience from any party inside a store not only contravenes with the Finnish legislation (if lids are open at any time) but also signals the criminals that an opportunity exists for even a major strike.

Five out of seven stores (70%) also had tobacco boxes in either offices or recreational facilities. A single box is worth around 1000€. As stated previously, a significant amount of goods are stolen by employees themselves. A relatively small and light box worth 1000€ left unguarded is definitely from the most tempting end of options available.

Company X struggles with highly fluctuant tobacco product inventory results. Due to tax legislation, for instance, nearly every Company X store in Finland has the exact same tobacco cartons in the store with two or three different product numbers. They get mixed up in the inventory count and cause a difference. From the seven inventories visited, none counted the tobacco products in accordance with the process guideline. Products with such value should be counted with two pairs of eyes to prevent the humane errors and sorted by product numbers. To simplify; process guidelines are to be followed with precision.

The author suggests that every single DM should revise how to count the tobacco products properly in an inventory. The store employees are also to be reminded about the importance of keeping the tobacco lockers closed all the time and locked when the cash register is empty. Such loose attitude toward managing tobacco related processes may induce heavy losses, yet very little effort is required to fix these deficiencies. The challenge for the DMs is to deliver a meaningful message to every employee expressing the importance of proper handling of tobacco products.

#### 4.4 The four phases of an inventory

The valuable work performed before an actual inventory is worth very little unless the inventories along with precise preparations are well organized. The author felt that none of the district or store managers completely understood how minor improvements regarding the four inventory stages induce better results. The following sections explain the major issues and causalities how a preparation, count and plausibility may support or capsise one another.

#### 4.4.1 Preparations for an inventory

The amount of preparations made was comparable to the willpower of achieving a good inventory results among the district and store managers. Still, relatively many stores lacked proper preparations. A connection was made between the preparations and inventory results; apart from one store (which had a previous result of 0%), the stores with good preparations conducted received a good result. The following figure demonstrates the absence of many basic functions in an illicit number of stores.

	Store						
	A	B	C	D	E	F	G
Products between shelves checked before an inventory	X			X			X
Store organized				X	X		X
Warehouse organized		X	X	X	X	X	X
An inventory meeting held							
Preparations lasted for more than a day				X	X		X

Figure 8: Inventory preparations

The data above demonstrates how Company X inventories lack good preparations on average. The absence of obvious actions reflects to the fact that inventories are just 'made' instead of performed, i.e. not valued as an important benchmark for the store.

The employees only count the products they have on their sight. Only three of the seven stores visited had inspected the possible products between the shelves. The inspection should be an axiomatic reflex for any store manager; how can anyone expect a valid result if such products are not checked and thus taken notified in the count?

The author conducted an inspection in every store, checking all the shelves of the first aisle in each store. If the aisle had less than three products in between the shelves, an assumption was made that the staff had really performed a thorough check before the inventory. From

store X, the author found products worth of 55 € from one aisle. Multiplying this by the number of aisles per store and the total value would produce a notable distortion in the inventory result.

Inspecting the shelves for any fallen products is a matter of organizing. The whole inspection should not take more than an hour from one employee. The store manager (eventually the DM) should ensure that such procedure is always performed with an inventory approaching. A more preferable situation, saving the one hour of work, would be to enhance the process unloading products. The employees would simply be reminded to check for the products between the shelves every time they unload the products. Most of the products require circulation due to freshness issues meaning that the employees have their heads between the shelves most of the time anyway. Inspecting the fallen products would require a minimal effort alongside the unloading.

Before an inventory, it is vital that both the store and its storage are well organized (discarded and products in their correct places). This enables an accurate and an efficient count. The author was definitely pleased with only three of the seven stores, meaning that their store really prepared a facelift for the inventory. On the other hand, the storages were in good condition apart from one store. Having the storage full of surplus products may very well result in severe miscalculations. Luckily this was not the case in general.

The district managers with badly organized stores should revise their staff about the importance of keeping a store in a good condition. This would not only enhance the image of the store from the customers' point of view but obviate the need for special measures regarding the inventory charring.

Three stores claimed to having started the preparations earlier than a day before the actual inventory. The paragraph above explained how preparations are not necessary if the store is capable of maintaining a certain level of orderliness in the daily routines. However, there are a couple of issues that need to be verified before an inventory. Firstly, the store manager needs to ensure that the layout of the store is similar with the layout in the device X. This enables a more rapid input plus the risk of inserting figures with false products (misplaced or out of stock) is minimized. Secondly, the stores are advised to communicate with the warehouse logistics proactively in order to avoid any disruptions with the deliveries. Only three stores had evidently been in contact with the logistics. Ensuring that the layout of the store is in order and communication with the warehouse logistics is functional makes the counting process less prone to risks. Lacking these two functions is not essential but they are seen as advisable.

The following chapter introduces the importance of an inventory meeting, which should take place at the beginning of an inventory.

#### 4.4.2 Inventory meeting

Not understanding the importance of an accurate inventory count was perhaps the single biggest collective delusion among the district managers, meaning that as long as an inventory count is performed with reasonable accuracy, the result will alter only marginally. The results acquired from the intensive project proved otherwise. In the first inventory the staff did not undergo a meeting before the count. As a result, our team found a total of 191 calculation mistakes, contributing a 5.7% share of the theoretical inventory loss. The whole inventory took about six hours and the author felt that the employees counting the products did not seem very motivated.

The following list presents the advantages of an inventory meeting:

- Understanding the meaning of an inventory
- Understanding the importance of performing accurately
- How to mark figures on the paper
- Where to place the paper and how
- Clear handwriting
- Organizing the store count order
- DM presented as the person in charge of the inventory
- One person responsible for organizing = less confusion = efficiency
- Who to ask for further advice
- Inventory critical products presented
- Motivational incentives
- No product traffic between the store and the storage

The following list presents the disadvantages of an inventory meeting:

- The store has five minutes deducted from the counting time

As seen above, an inventory meeting ensures that the whole event is well organized from the start and that work is consummated with perfection.

The second inventory in the project started with a meeting. Our team had suggested that such an expedient could prove constructive. The staff agreed and the effect was positive. The calculation mistakes decreased by 40%, the inventory took two hours less, the employees (nearly the same group of people as the week earlier) seemed a lot more motivated and the overall result dropped from -0.43% to -0.05% = an excellent result. Because of the minor meeting, motivation, accuracy and efficiency all increased just as our team had expected.

Unfortunately, none of the seven stores visited outside the intensive project held an inventory meeting. The author believes that the inventory meeting is an essential tool for every store regarding the future inventories and should be conducted in every inventory. The five extra minutes is worth nothing compared to the benefits available.

#### 4.4.3 Inventory count & input

The inventory count is the part of an inventory in which the manual calculation of the products occurs. The mathematical demands are similar to what is taught at primary school. Nonetheless multiple mistakes are made, either humane or due to lack of motivation. It is essential that a proper count is performed. Therefore the store is able to know their exact liquidity.

The basic rule is that everything in the store is counted with a number reflecting to its exact quantity, either in pieces or kilos. Some products have two or more places in the store from which they are sold. It is important to take every place into account and sum them up - not count them twice, doubling the real value.

The input part consists of person(s) inputting the counted numbers to device X. The number given for device X is the one that counts. A person may count the correct amount of 10 boxes and 25 bottles of toners but the person responsible for input may accidentally input zero boxes and 25 bottles resulting in a deficit of ten boxes. The administration provides an analysis based on the input numbers and since nobody is monitoring the actual amount of goods a store has, it is really important to perform the input with care.

There is a predefined content of units in a box for each product which is why the device X's settings enable input in both boxes and units. Therefore the counted values are usually marked like '2/25', meaning 'two boxes, 25 units'. The danger with such practice is when a person makes an inaccurate estimation of one box being full when in reality it lacks two units. This results in a surplus. A full box with two extra pieces marked as one full box results in a loss. This phenomenon is fairly common with irregular sized products, such as bags of candies. Counting in units is always more accurate.

A distinction between an accurate and a valid result is to be discussed. A store may receive a result of 0%, meaning that every single product that arrived to the store has either been sold or notified otherwise (deducted from the stock quantity) and no products have been stolen. The inventory count would also have to be 100% accurate. In a theoretical sense the 0% result would be ideal but from a more practical aspect such result is always invalid. No store can function with such accuracy. Therefore the target result is always close to -0.5%. The negative target result implies that there is room for inhumane errors and thefts which both are undesirable yet normal events.

The table below represents the district managers' level of commitment and interest toward achieving an accurate result in an inventory count.

	Store						
	A	B	C	D	E	F	G
DM supervised the quality of counting							
Count organized from start till finish	X			X			
Advice given for inventory critical products			X				
Technical regulations obeyed				X			

Whenever performing anything non-robotized, a risk of human error is always present. An inventory count is not an exception. The inventory process guideline insists that the DMs should check 50% of the counted products yet this was nowhere near the case in any store. Besides the careful tobacco count, the DMs have plenty of time to perform the checks. The reason for not conducting those checks remains unclear though one DM (District manager Y 2013) implied that the counting errors are minimal and eventually balance resulting in a 0% difference on behalf of the counting. The author conducted a check for 20 random products in every store (140 checks overall). A total of 21 miscalculations were detected (15%). For instance, one product would have resulted in a deficit of 255€ without the checking. No DM should claim that counting errors, especially worth hundreds of Euros, eventually balance and are thus approvable.



Company X's inventory module monitors the balance of every product. Even if the counting errors would balance in monetary terms, a number of products would still have either a deficit or a surplus. Such products, if counted correctly in the next inventory, would have the exact opposite difference, resulting in an inaccurate result again. Therefore it is a necessity that every product is counted properly. District manager Y was not the only one who advocated the balancing of counting errors. There were two other DMs who insisted the same. The reason behind such arguments could be duty negligence or partial theoretical knowledge.

An unorganized count does not necessarily generate inaccurate results but most certainly hinders the whole process from functioning with maximum efficiency (causality with an inventory meeting). Only two out of seven stores had their count organized from start till finish.

Numerous products in the stores require extra attention before the count. As an example, product groups such as chocolates, have multiple packages with similar labels. Such products may have mixed up during the unloading and ended up in the wrong places. An inexperienced (or unmotivated) employee responsible for counting these products will most likely not notice these errors. The DMs should either check these errors beforehand or mention about the critical products in order to avoid futile counting.

As a result, a list of inventory critical products was created on behalf of the author. All the products with similar labeling, unclear packaging or other obscurities are now collected (and updated regularly) on a single list, which is now available in every store. The DMs are also instructed to use the list.

Neglecting the device x technical regulations (enables a slightly more rapid input) in six stores closely reflects the level of commitment among the district managers. Not performing the input in accordance with the instructions after the count distorts the quantity of several products between administration and sales. The six stores that disobeyed these instructions all claimed that the slightly distorted inventory count is the reason why the input process is not important. Every minor detail is significant and a proper organizing enables the correct input. Without the organizing, the processes slow down, meaning that the inventory costs more money.

The estimated length of an inventory (including the preparations, counting and plausibility check) is x hours. As an incentive, the store with the best inventory result spent two hours less than the estimated length. This particular store was in an excellent condition, meaning that the preparations had started in time. The count was well organized from start to finish and technical regulations were obeyed with care. This invalidates the argument that: "we are not given enough hours to conduct an accurate inventory". (District manager B 2013)

#### 4.4.4 Plausibility check

After an inventory, the administration compiles a list of all products with an inventory difference of x Euros or more. These products are to be recounted during the next day to ensure that the radical miscalculations are avoided. After the recount the list is sent back to the administration with new balances. The new counted balance is the one that is taken into account.

Due to the fact that the new balance overrules the old calculation, there is a risk that the old one is the correct balance (products are actually missing) but a mistake is made during the plausibility (recount), resulting in a distorted balance. Therefore the person in charge the plausibility check has to be unerring. A good example of how this check can demolish an inventory completely occurred in store X. Two similar products appeared on the plausibility list and they were recounted incorrectly by the store manager. As a result, the new balance would have resulted in a final inventory result of +2%, meaning that the next inventory would have been in two weeks time instead of eight weeks (result of -0.8%). The administration fortunately double checked these calculations and the mistakes were corrected.

Company X stores all had some difficulties with product group x counting. Different opinions between the store and district managers were detected. As a result, the author along with his colleague created instructions on how to count product group x products in the correct way. These particular products should no longer manifest in the plausibility check list, unless there is an actual shortage.

To conclude, Company X should arrange an inventory recap consisting of both theoretical and practical points. This would definitely prove beneficiary. Far too many theoretical deficiencies were detected as well as conceptual misapprehensions.

#### 4.5 Information accessibility

The CEO of Company X stated that "the current situation with information accessibility inside the company is excellent. Unlike before, nowadays we have up-to-date data and process guidelines available for everyone in every store around the country. The question is whether the district managers are aware of such information richness or are they just incapable or unwilling to utilize these ancillaries in order to achieve better results".

The author agrees with the CEO that the company provides plenty of informative tools for the district managers and store managers. In fact, a new device called 'device Y' has been taken into practice recently, consisting of invaluable data regarding the processes affecting the in-

ventory outcome. With the help of device Y the district managers should detect the problematic areas and apply changes immediately.

## 5 Summary with commentary

As this thesis suggests, an inventory loss is a mixture of both human misunderstanding and process guideline imperfection. The sales department of Company X should ensure that the process guidelines are completely operational. The second step is to implant the importance of conducting store processes properly into to the consciousness of the DMs.

The major problem Company X has with its inventories is the fact that the process guidelines are not obeyed 100%. In a situation with everybody operating under the same guidelines, the company could investigate thoroughly the processes of one store after which upgrades would be arranged throughout the country. Process upgrades without noticeable improvements would only prove that the problems arise from elsewhere than the actual guidelines, for instance, from the district managers' incapability to act as a convincing leader ensuring that the work is conducted 100% correctly. The amount of actual follow-up conducted by the people in managerial positions (including the duty managers) is also essential. The author believes that centralized check-ups are the only way to ensure that the final and the most critical phases of work in each process are correctly performed.

The unpleasant inventory results derive from minor errors occurring daily. The positive thing for Company X is that these minor errors are now recognized inside the company. No major upgrades are needed for the processes, just minor improvements. Company X should therefore focus separately on the specific daily processes mentioned in this thesis and develop improvement methods designated to diminish the unnecessary inventory differences. This requires time and patience but the author is confident that results will improve in the future, especially if the new district managers are given proper education from the moment they are given responsibility.

Motivating the employees with examples, not incentives, could prove beneficiary. The more people understand the consequences of misconducts, the more motivated they should become, especially knowing that their work is under constant supervision. This does not mean that the employees should work more but improve the quality of work.

Implementing new ideologies or operating methods is hindered by the possible lack of authority, which is something not everyone is born with yet is very hard to attain as a person. A district manager may know everything about inventories yet still fail in internalizing the know-

how to his or her employees due to lack of authority. A lack of mutual trust between the DM and subordinates occurs and development of any kind halts.

To conclude, the more the district managers realize the importance of their position, the better inventory results Company X can expect. A strong will to learn and make progress is the only requirement. All the information needed is available.

### 5.1 Theoretical linkage

The theoretical background proved valuable in terms of understanding how management and the ability to produce efficient organizing are essential elements in basic processes. This theoretical approach enabled the author to investigate the behavior of the district managers from a different point of view. Without these particular theories, the author would have conducted a substantially narrower study, resulting in only quantitative findings without true benefits for the company.

## References

Article: Argyris, C. 1994. Good communication that blocks learning. Harvard business review on organizational learning. Boston: Harvard business school publishing.

Company X CEO. Discussion 15 March 2013. Company X. Location X.

Curry, M. No date. Leadership: What makes a good leader. Accessed 10 April 2013  
<http://www.business-marketing.com/article-leaders.php>

Davenport, T., Harris, J, & Morison, R. Analytics at work: smarter decisions, better results. Boston: Harvard business school publishing.

District manager B. Interview 26 February 2013. Company X. Helsinki.

District manager X. Interview 19 February 2013. Company X. Espoo.

District manager Y. Interview 15 January 2013. Company X. Kerava.

Halpern, B. & Lubar, K. 2003. Johtajuus ja vetovoima. Translated by Mauri Laukkanen. Helsinki: Mynäprint Oy.

Järvinen, P. 2001. Esimies ja työyhteisön kehittäminen. Porvoo: WS bookwell Oy.

Laudon, K. & Laudon, J. 2011. Essentials of management information systems. New Jersey: Pearson education, Inc.

Loeb, M. & Kindel, S. 1999. Johtamistaito keltanokille. Translated by Riikka Parkkonen. Jyväskylä: Gummerus kirjapaino oy.

Maxwell, J. 1998. The 21 irrefutable laws of leadership: follow them and people will follow you. Nashville: Thomas Nelson, Inc.

Spiik, K-M. 2004. Tulokseen tiimityöllä. Vantaa: Dark Oy.

Store manager X. Interview 15 January 2013. Company X. Kerava.

Taloussanomat. 2010. Näin paljon myyjät varastavat.  
<http://www.taloussanomat.fi/kauppa/2010/10/19/nain-paljon-myyjat-varastavat/201014496/12> (Accessed 13 April 2013).

## Figures

Figure 1: Thesis framework .....	8
Figure 2: Phases of working .....	13
Figure 3: Theoretical Framework .....	15
Figure 4: Operational ideology .....	19
Figure 5: SWOT-analysis for Company X's inventory based processes .....	21
Figure 6: Write-offs.....	22
Figure 7: The process of improving cash register operations .....	25
Figure 8: Inventory preparations.....	28