Developing scenarios to cut accounting and auditing expenses:
Case student union X

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This project-based thesis aims at solving the accounting and the auditing problems of the case company, which is a student union. The main objective of the project is to decrease costs related to accounting and auditing to target levels set by the commissioning party. This is achieved by performing four project tasks and developing a product - a set of scenarios. The scenarios are based on the two primary alternatives: insourcing and outsourcing of accounting services. Various development schemes are elaborated under these options. An innovative concept of digital accounting is introduced and incorporated into one of the scenarios.

Structurally, each project task combines theoretical and empirical research parts. They are implemented by using a zipper model, where theory is applied together with the research data. The theoretical framework is established through exploring a variety of international and Finnish sources including books, periodicals and local legislation. Internet research has been a significant part of the project. Although the primary research method for the empirical part was chosen to be qualitative, a quantitative approach was employed to facilitate the study and perform measurements. Interviews and observations were utilized as the main research tools.

The project achieved its goal successfully: the accounting and auditing expenses of the case company were dramatically decreased by implementing one of the proposed scenarios. The most valuable findings of this thesis for the case company and the field are cost-cutting scenarios, an accounting software classification and a hierarchy of auditors in Finland.

**Keywords**
Accounting process, e-accounting, digital accounting, auditing, student union
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1 Introduction and background to the thesis

The headlines of the world newspapers and international TV channels trumpet on cost-cutting actions of companies all over the globe. The Economist (2012), Financial Times (Stothard & Foy 2013), Deutsche Welle (2013), the BBC (2013) and others are full of articles that report how world famous employers are constantly reducing work places and saving on employee well-being, organizations are neglecting safety and quality standards to reduce costs. It becomes evident that in order to face the challenging market conditions and remain profitable, businesses from various areas have to bring their expenses to a minimum level.

On the local level, Elisa, the Finnish Telecommunications company, is reducing jobs in IT; the national airline Finnair is starting a wide scale saving program; Nokia, the multinational communications and IT Corporation, is continuing to terminate working contracts with its employees (Yle uutiset 2013). These and many other major Finnish companies have taken measures to improve their financial position, not to mention the smaller cases which the mass media does not spotlight.

Based on each particular situation, savings spread to different business areas varying from production to marketing. The focus of this thesis will yet be on cutting administrative expenses, namely, accounting and auditing costs of the case company.

The thesis topic emerged from a real business need of a student union to decrease its administrative expenses. The Secretary General of the union expressed his dissatisfaction with the status quo which aroused from comparing Company X’s administrative expenditure to that of the other similar-size student unions in Finland. The Secretary General made it clear that he was mostly dissatisfied with the levels of accounting and auditing costs. He announced the anticipated budget for these expenses for the next year and the desired time-frame for solving the union’s problems. Both seemed realistic to the thesis author, who proposed her help in a form of a Bachelor’s thesis.
So it was agreed that finding solutions to Company X’s problems would grow into this Bachelor’s Thesis. According to the agreement with the commissioning party, neither the name of the student union nor the contact person’s name will be revealed, since the research contains sensitive financial information. Throughout the thesis the union is referred to as Company X, student union X or the commissioning party. The contact person is mentioned as the Secretary General.

1.1 Case company introduction

The commissioning party of this project is a student union for international students of a University of Applied Sciences in Finland. As stated in the student union rules (2011) the main purpose of the union is to promote its members’ social, mental and learning aspirations. The student union operates in close cooperation with other unions and is engaged in educational and social affairs, international affairs, provides tutoring and sports services, offers student discounts and benefits, organizes events and publishes a student magazine.

The organisation of the union is made up of the Representatives Council and the Board. The Representative Council members are elected yearly by the students. The chosen Representatives are responsible for managing the entire union and they also decide on the members of the Board, which is in charge of everyday activities.

The contact person of the thesis author in the case company is the Secretary General of the union, who is responsible for managing union’s everyday activities. There are currently three employees working with him in the union’s office and around 10 tutors who are involved in union’s activities. The office workers are responsible for arranging union’s everyday work and administration, while the tutors function as instructors and advice new students and exchange students who are in need of help. Among other plans, the union is considering expanding its office by hiring one more employee for a position of student affairs specialist.

It is worth mentioning at this stage, that the union is a student organization and its primary goal is not profit generation, as stated in the Finnish Universities Act
(558/2009) Chapter 5, Section 46. The union is partly financed by the University of Applied Sciences to which it belongs and partly through own profit generating activities, including sales of party tickets, coverall, badges, etc. In spite of the fact that the union is supported by the University’s funding, it is crucial to optimize its expenses and remain profitable. Because this is what the union’s stakeholders demand.

1.2 Project objective (PO) and project tasks (PTs)

Based on a discussion with the commissioning party, it was decided that the thesis will take form of a project and project objective was formulated as follows:

**Finding solutions to decrease case company’s current accounting costs by 50 percent and auditing costs by 80 percent.**

The objective is achieved by developing a product - a set of scenarios targeted at solving the accounting and the auditing challenges of the student union X. The project objective is further specified into project tasks and sub-tasks, which are:

**PT 1. Exploring the accounting process and its costs for the case company.** This includes the following sub-tasks:
- Conducting a theoretical research to explore a phenomenon of the accounting process
- Studying the legal obligations of the case company to perform accounting
- Conducting an empirical research for the purpose of understanding the current accounting process in the union and its costs

**PT2. Creating a set of scenarios for decreasing accounting costs of the student union X.** The following sub-tasks are performed:
- Comparing the theoretical description of the accounting process with the real process in case company in order to detect development areas
- Creating scenarios based on brainstorming, discussions with the case company and research findings
− Discussing scenarios with the commissioning party

PT3. Studying the option selected by the case company in more detail. The sub-tasks involved are:
− Exploring the possibilities and prerequisites of implementing the scenario
− Evaluating the financial viability of the alternative by conducting the necessary research

PT4. Reducing auditing costs. This requires the following sub-tasks:
− Studying the theory of auditing and its legal requirements for the case company
− Determining the cost drivers of the auditing expenses
− Presenting the auditing solution for the case company

1.3 Scope of the project and demarcation

As described in the introduction, most of the companies nowadays are endeavouring to cut different types of costs. For example, the case company is seeking to decrease its administrative costs. At the initial meeting with the commissioning party numerous administrative problems of the union were listed. These ranged from accounting service provider relations to internal security issues. During the discussion with the Secretary General of the union, the most vital and urgent problems were selected to be covered by this thesis, leaving out other less important issues to be solved later.

So it was agreed that minimizing accounting and auditing costs are the top two priorities for the union. Costs being too high hampered the company’s prosperous development. Solution to these problems are expected to pave the way for the successful implementation of the union’s short- and long-term plans.

It should be noted that the project mainly takes the financial approach to the problem, excluding other perspectives which might affect the final outcomes. The thesis aims at proposing solutions to the commissioning party, but it does not cover the implementation stage. It is also important to highlight that the project is customised to meet the needs of a specific student union. Therefore the solutions and findings in the thesis
might not be applicable to other companies in the same field. The demarcation process is visualised in Figure 1.

![Diagram](image)

**Figure 1. Demarcation process**

### 1.4 Theory framework

This project gradually took a form of a problem-solving process, where theory and research data are applied together to address the problems of the commissioning party. While implementing project steps, it felt that the best suitable option for this thesis would be to apply theory simultaneously with the empirical research part, using a zipper model (HAAGA-HELIA University of Applied Sciences 2012, 30).

International accounting books build the core theory in this thesis. They mostly present an International Financial Reporting Standards (IFRS) approach to different accounting and auditing matters. However, since the case company is operating in Finland, the author has also included books by Finnish writers and Finnish legislation, which better reflect the specific features of local accounting and auditing. Figure 2 visualises the approach to selecting theory.
International theory on accounting and auditing

Figure 2. Finland specific requirement within international framework

Figure 3 below presents three components that have been selected to build theoretical framework. Accounting and Auditing are two major fields that have been studied to gain a theoretical perspective. The innovative concept of Digital Accounting, which lies within the Accounting component has been an important subject for theoretical research. The reason is that according to recent findings (Real Time Economy Competence center 2012a) Digital Accounting is capable of dramatically reducing accounting expenses. Finnish legislation was a significant element of theory framework. So the juxtaposition of the three components is what the thesis author has been focusing on when building theory framework.

Figure 3. Components of theory framework

In this thesis innovative ideas and leading technologies are utilized to assist the thesis author in finding solutions for the case company. It is worth mentioning that the no-
tion of Digital Accounting (also referred to as e-accounting) is fairly new and still developing. Consequently, there is yet not enough academic books covering that area. This has created some challenges in finding reliable sources to provide definitions to the terms in this project. Throughout the thesis the author is widely referring to Deshmukh’s (2006) book on Digital Accounting, which can be reasonably considered slightly outdated, concerning the fact that e-accounting is evolving so fast. Although it does not contain information on the latest enhancements in accounting software, the book introduces basic concepts of e-accounting and describes key terms quite exhaustively.

As Finland is considered a pioneer in the field of e-accounting (Real-Time Economy Seminar 2012; Lahti & Salminen 2008, 23), most of literature addressing the topic is only available in Finnish. So in order to present the latest ideas and innovative concepts, the author has made a review of these sources. Although some printed editions are available still most of the material on real time accounting solutions is only available on webpages of companies who offer that software in Finland.

1.5 Key concepts

The thesis covers a variety of accounting related terms, so the author finds it important to outline them in this chapter to avoid ambiguity and misinterpretation. When searching for definitions of key concepts, diverse and even contradicting definitions were found. The fact that the thesis author had to deal with Finnish – English translations complicated the issue. The selected explanations are the ones that best reflect their meaning within the context of this thesis.

The primary objective of this project is to decrease administrative expenses: specifically accounting and auditing costs of the case company. So it is crucial to define administrative expenses and establish a difference between its components.

Administrative expenses

Weetman (2011, 175) refers to administrative expenses as a collective term for all costs which have been incurred in order to keep the business running but which are less
closely related to the direct activity of making sales. He continues that normally the manager’s salary, general maintenance costs, legal, accounting and auditing expenses are brought together under this heading.

**Accounting and auditing expenses**

The reason why the case company commissioned this thesis was that they were concerned with the level of administrative expenses. Under these expenses, the student union separates accounting and auditing costs. Therefore it was decided that these types of expenses would be addressed individually within this thesis. Meaning that accounting expenses solely include costs related to accounting of the company, while auditing costs refer to all the expenses associated with the auditing of the union’s financial statements. An alternative approach would have been to combine these costs under the heading of accounting expenses, as some companies are doing.

**Accounting process**

Subsequently, another definition which has caused some confusion is the definition of an accounting process. The accounting process in a company, as defined by Black (2009, 2-3) is the process of identifying, measuring and communicating financial information to its users. Within the setup of this thesis, accounting process excludes auditing, which is listed by some authors as its closing stage. The following chapter presents different views on the accounting process in greater detail and explains the decision to address the issue in the chosen way.

**Bookkeeping (fin. Kirjanpito), Accounting (fin. Laskentatoimi) and Financial Management (fin. Taloushallinto)**

Figure 4 presents a relationship between different English and Finnish language terms that are used in this thesis. Undoubtedly, there will always be a ground for debates, as translation issues are very sensitive. Moreover, different authors quite often hold various opinions about the same phenomenon and therefore interpret it in their own ways. But again, the definitions selected by the author more accurately describe what they are supposed to describe in this thesis.
The broadest definition is Financial Management (fin. Taloushallinto) and it refers to an operational model that a company uses to follow its economic transactions in such a way that it can report its results to the stakeholders. It has a more extensive meaning and wider functions than Accounting (fin. Laskentatoimi). (Lahti & Salminen 2008, 14.) As defined by Shapiro (2010, 44) financial management is an operational activity of the business which deals with effective accumulation and utilization of monetary resources. The term encompasses such areas as accounting, risk management, capital budgeting, etc.

Interestingly, some of the Finnish sources refer to Taloushallinto, when describing a concept similar to Accounting in English books. However, according to Finnish-English Dictionary of technology and commerce (2001, 1013) the direct translation of the word Taloushallinto in its business meaning would be financial management or financial administration. The problem is that the English understanding of financial management is often much broader than the Finnish definition of Taloushallinto. So in its narrow meaning, Taloushallinto could also stand for Accounting in some cases.

**Accounting vs. bookkeeping**

Although sometimes used interchangeably, accounting (fin. laskentatoimi) and bookkeeping (fin. kirjanpito) do refer to different activities. Hussey and Hussey (1999,
4-5) divide accounting into smaller processes, one of which is bookkeeping. They describe it as recording business transactions, usually into the accounting system. In other words, the definition of accounting is broader and includes a bookkeeping process as one of its stages. So bookkeeping (fin. laskentatoimi) is the most limited definition as it focuses specifically on legal accounting requirements and internal accounting techniques (Lahti & Salminen 2008, 14).

Managerial and Financial Accounting
Braun, Tietz and Harrison (2010, 5-7) along with other authors in the field classify accounting into managerial and financial. Managerial accounting system is primarily designed for internal company’s purposes to provide managers with financial data they need to plan, control and make decisions. On the other hand, financial accounting mainly focuses on producing quarterly and yearly financial statements to be used by external stakeholders, like investors, creditors and auditors. (Horngren & Harrison 2008, 5.)

The thesis approaches the problems of the commissioning party from both the managerial and the financial accounting perspectives. On the managerial level, the author looks into developing internal accounting practices to increase awareness of the managers about the union’s financial position. This improved awareness also serves the financial accounting purposes by providing stakeholders with better quality information.

Digital accounting/ E-accounting/ Real time accounting
The meaning of terms Digital Accounting or e-accounting is best captured in definition by Deshmukh (2006, 1),

“Digital accounting, or e-accounting, as a corresponding analogue, refers to representation of accounting information in digital format, which can be electronically manipulated or transmitted.”
The author also states that the standard definition of Digital Accounting does not yet exist. What the term actually implies are the changes in accounting due to Internet and information technologies. The main distinguishing feature of Digital accounting is that all the data is processed in digital format, meaning there is no paper involved. For example, using PDFs is not considered as treating information digitally. The terms Digital Accounting, E-Accounting and Real-Time Accounting are mostly used synonymously in the context of this thesis.
2 Project planning

This chapter will look in more detail into how the project was planned. Structurally the project consists of four tasks and related sub-tasks that need to be fulfilled in order to reach the main objective – decreasing accounting and auditing costs to target levels. Each project task involves theoretical and empirical research parts. The main outcome of the project is a final product, which is presented in a form of cost-cutting scenarios for the case company. Attachment 1 presents a detailed Gantt chart of the project.

2.1 Project timeline

The starting point was on February, 6th 2013 when the initial meeting with the case company was held. At this point the thesis topic emerged. Shortly after that a thesis plan was proposed by the thesis author and approved by the commissioning party. It was decided that the thesis would take a form of a project. The estimated time for completion of the project and presenting results for case company was agreed to be 4 months.

The first project tasks (Exploring the accounting process and its costs) took place during February and March 2013. It involved theoretical research (to investigate a phenomenon of an accounting process), overview of legal requirements and an empirical part (to understand how the current accounting process looks like in the student union X).

The second project task (Creating cost-cutting scenarios for the case company) immediately followed the preceding stage. In this part of the project the author compared a theoretical description of an accounting process with the real process in the commissioning company to detect the improvement suggestions. Afterwards, a number of scenarios were brainstormed based on theoretical data, empirical research and discussions with the case company. In early April the General Secretary made a decision which scenario to implement.
Although, the project was demarcated in such a way that implementation stage is excluded from it, the selection of a specific scenario required additional research. This was the project task three (**Studying the selected option in more detail**).

The fourth and the final project task (**Solving the auditing problem of the union**) was performed during May 2013. This part included a theoretical and a legal study of the auditing process and finding solutions to decrease the costs.

### 2.2 Empirical research component

As the empirical research part was a considerable part of the project, the author feels that there is a need to discuss the research methodology. According to Matthews and Ross (2010, 7-10) the motives and objectives of a research could be different, however any research includes three fundamental components:

- the research question
- the research process
- the answer

Gray (2009, 13) claims that research process requires engagement with theoretical perspectives. In cases when it occurs before undertaking the research, the approach is deductive, in situations when it happens after - the approach is inductive. As it happened with this thesis, the theoretical concepts to be explored were not clear before some empirical evidence was collected. Consequently the approach in this thesis is inductive.

### 2.3 Research design and method

Creswell (2013, 46) define the research design as a plan for conducting a study. Cooper and Schindler (2011, 139) specify that it is an activity and time-based plan for investigation, which is specially created to reach the project objective. As the research part is an important element of the entire project, the Gantt chart in Attachment 1 could in a way serve as a research design.
Printed editions on doing research distinguish between two research methods: qualitative and quantitative. Flick (2009, 32-33) recommends that the choice is based on the appropriateness of each approach. Matthews and Ross (2010, 142) continue that factors like the research problem, its scope and personal interests of the researcher will also have an influence on the research method.

The primary research method in this thesis was chosen to be qualitative, which tends to be concerned with words rather than quantification in the collection and analysis of data (Bryman & Bell 2011, 717). Saunders, Lewis and Thornhill (2012, 78) describe qualitative approach as being especially suitable in cases when specific and detailed information is needed. Although the dominating approach to the research is still qualitative, the study incorporates minor quantitative features. Since the subject area of this thesis is accounting and the main goal of the entire project is to reduce accounting and auditing expenses of the case company, collection and analysis of quantitative data play an important role. In other words, in order to reach the project objective, the data needs to be expressed numerically.

Bryman and Bell (2011, 632) present Hammersley’s (1996) classification of approaches to mixed methods research:

- Triangulation. This refers to using multiple methods and sources of data so that finding could be cross-checked.
- Facilitation. In this approach one research strategy is employed to aid research using the other strategy.
- Complementarity. This approach occurs when both research methods are used to study different aspects of a phenomenon.

The approach that best describes the situation with this thesis is facilitation. The author is using qualitative research strategy as the key method, while employing quantitative method in order to perform measurements.
It should be noted that this is also a case study research. Yin (2012, 4) and Creswell (2013, 97) share an opinion that a case study research involves the study of a case within a real-life, contemporary context or setting through detailed, in-depth data collection, involving observations, interviews, analysis documents and reports. The term case study is strongly associated with qualitative research and the two are sometimes used synonymously (Gray 2009, 169).

2.4 Data collection methods

Gray (2009, 33) discusses the main types of data collection methods. According to his classification, the three basic methods that have been utilised in this research are interviews, observations and secondary data. Within this study, both primary and secondary data is obtained. Primary data, in contrast to secondary, is data collected solely to fulfil the needs of the researcher. (Webb 2002, 22)

Interviews
A list of all the interviews organised during the project is in Attachment 2. Basically, two main types of interviews were conducted: personal in depth interviews and distant interviews (Cooper & Schindler 2011, 249). In the process of this research, six face-to-face interviews were organized with the case company representative, including the initial appointment, where the thesis topic emerged. The length of these interviews was from 45 to 60 minutes. The interviewee is the case company’s Secretary General. The author finds it sufficient to interview only person, because he possesses all the required information regarding the union’s accounting, auditing and financial situation.

The interviews merely took a form of a discussion, however a list of topics and questions to be covered was prepared for each meeting. The information was transcribed during each meeting. The expected outcome of these interviews was supposed to provide a deeper understanding on the current accounting process of the union and detect the areas to be explored from a theory perspective.

Ten shorter distant interviews were organised via phone, e-mail and online chat. The interviewees in this cases were sales representatives of different companies in Finland
offering accounting services and software. The purpose of these interviews was to gather information on prices of their services and products. The length of the interviews did not exceed 20 minutes. The information collected via phone interviews was transcribed; the rest of the data was received via e-mail in a form of sales offers and quotes.

All the e-mails and phone calls were answered, so the response rate reached hundred percent. Some of the responses were delayed due to different reasons, however this did not significantly affect the results of the research.

**Observations**

In the process of collecting empirical data, the author has used an observation method.

> “Observation involves the systematic viewing of people’s actions, analysis and interpretation of their behaviour.” (Gray 2009, 397.)

Saunders et al (2012, 676-677, 682) classify observation into participant and structured. Gray (2009, 397) interprets the definitions as follows: the participant observation is qualitative by nature and emphasises meanings that people give to their actions, while structured observation is largely quantitative and focuses on frequency of actions.

In the process of the empirical research, the author used participant observation. The purpose of the observation was to analyse the current accounting process of the case company. The author’s role could be best defined as observer-as-participant (Bryman & Bell 2011, 436-437): the author was acting as an interviewer, an observer, but was not directly influencing the accounting process, which she was observing.

**Secondary data**

The secondary data collection and analysis are important part of the research part of this project. Secondary data analysis is concerned with re-working of data previously collected (and in some cases analysed) by others in order to present own evaluation and interpretation of information (Gray 2009, 497, 581).
Specific sources of secondary data include invoices for accounting services for years 2011 and 2012 from the accounting service provider and the Agreement between the union and the service company. The documents were e-mailed to the thesis author as scanned copies of the original documents by the Secretary General of the union. The invoices contained information on monthly accounting expenses of the union, summarised under different categories: basic charge for the accounting services, additional working hours of an accountant, issuing financial statements and tax reports.

Another important source of secondary data was information on other student union’s accounting and auditing costs. The information was obtained via e-mail message from the Secretary General. The student union is similar in size to the case company and operates in the same field in Finland. This makes it relevant to compare the two unions’ accounting and auditing costs. This information provided an opportunity to benchmark the expenses of student union X and make a justifiable argument that their amount is too big.

For the purpose of comparing accounting service providers and different accounting software, the thesis author often had to ask for a quote online or browse companies’ webpages. So Internet research was an integral part of this thesis. Dolowitz, Buckler and Sweeney (2008, 14) define internet research as

“The systematic use of online resources to answer a specific question in order to solve a problem that is amendable to investigation via internet protocols and resources.”

Using Internet as a source of data collection is a debatable question. According to Bryman and Bell (2003, 496-498), among other, the disadvantages of using internet include challenges in finding a reliable source of information due to huge amounts of data available to its users. However at some stages of the project, Internet was the only accessible source of information.
2.5 Data analysis techniques

The collected data was then analysed by editing and reducing it to a manageable size, developing summaries and looking for patterns, just as prescribed by Cooper and Schindler (2011, 717).

The Agreement between the case company and the accounting service provider was analysed in depth. The contents of the document were reflected against the requirements of the Finnish Contracts Act (449/1999). The actions of both parties were then evaluated based on the terms and conditions of the Agreement.

The quantitative data collected from invoices and interviews was analysed using Excel. The average monthly bill for accounting services was calculated; the cost drivers were identified and quantified as a percentage of total monthly accounting expenses. The comparative analysis of various cost-saving options for the union was produced. This analysis revealed the potential savings for the case company when different scenarios are applied. As the target of the thesis was to find ways to decrease the existing accounting expenses by 50 percent, the possible savings are also expressed as a percentage of the current monthly expenses.
3 Accounting process (PT1)

This chapter focuses on project task one - analysing an accounting process. Firstly it introduces a theoretical perspective on what an accounting process is and the stages it is composed. Secondly a legal obligation to conduct accounting is discussed. And finally, an overview of the current accounting process at case company is presented.

3.1 Accounting process in theory

A phenomenon of accounting process is presented in almost every accounting book. However depending on the focus of the book, the concept is addressed from different perspectives. Based on the research, the most controversial aspect is: What components does the accounting process include? Further in this chapter various viewpoints are discussed, listed from wider definitions to more narrow ones. Overall, 6 versions of an accounting process are discussed and finally the author’s own summary is presented.

Accounting process as described by Frederick and Gary (2011, 1) is composed of three broad processes: measurement, disclosure and auditing. At the measurement stage the economic activities and transactions are identified, categorised and quantified. This information provides insights into the firm’s financial position and profitability. Then follows the disclosure stage, when accounting measurements are communicated to their intended users. The final stage is auditing, when qualified accounting professionals attest to reliability of the two previous stages.

A similar point of view holds Mallin (2004, 4-5), who approaches the issue from a corporate governance perspective. She represents stakeholders’ point of view and emphasises the importance of financial information being assessed by auditors. It might be a bit of an extrapolation to claim that Mallin observes accounting and auditing processes as inseparable, but the author makes it clear that they are closely related.

Lahti and Salminen (2008, 15-17) present a clear process view of accounting. Their model is more condensed than the two previous ones.
As summarised in Figure 5, the accounting process starts with five initial processes, which are listed under each other. The general accounting process is a linking element. This process includes sub processes such as adjustments (jaksotukset), matching (täsmäykset) and period closing. Reporting is the next process, which uses information from all the preceding processes and starts where the sub-processes end. Filing refers to archiving and storing of financial information. (Lahti & Salminen 2008, 15-17.) The authors do not specify which kind of controlling processes they mean, whether they internal controls or external, e.g. auditing.

Helanto, Kaisaniemi, Koskonen, Kuntola and Sivola (2013, 30) present another view on how the accounting process should look like in a company. This concept is even more limited.
It is worth noting that in the representation in Figure 6, auditing is not included in the accounting process. The sequence ends on reporting, separating auditing as an independent process. This position is supported by Tomperi (2011a, 7-11) who ends the list of accounting essentials with the principle of public access and the importance of releasing financial statements of a company.

Horngren and Harrison (2008, 200) refer to the accounting process as the accounting cycle and introduce the following guidelines:

1. Start with the beginning account balances.
2. Analyse and journalise economic transactions.
3. Post to accounts.
4. Compute the unadjusted balance of each account.
5. Enter the trial balance.
6. Prepare financial statements (reporting).
7. Post the adjusting and closing entries (optional).
8. Prepare the post-closing trial balances (optional).

This version is similar to models of Helanto et al (2013, 30) and Tomperi (2011a, 7-11) as it basically end on preparing financial statements (reporting). The two last options are voluntarily and are not always performed by the companies.

The basic books on accounting that were studied do not include any information on auditing. Moreover, the specialized auditing book by Elder, Beasley and Arens (2010, 4) introduces auditing as a complex and distinctive process. Finally, the case company sees its accounting and auditing expenses as separate cost items. With regard to both opinions, those three arguments combined influenced the decision to treat accounting and auditing individually within the context of this thesis.

Based on the information provided by different sources, Figure 7 below presents author’s own interpretation of what elements the accounting process encompasses:
Figure 7. The stages of an accounting process summarised

The first stage of the accounting process involves recognition that a business transaction has occurred. Whether it is payment of a purchase invoice, issuing a sales invoice, buying or selling stocks; an economic transaction has to be identified and quantified. It should then be recorded and the supporting documentation archived. The double-entry bookkeeping (Black 2009, 20) requires that each transaction is booked in two locations within the accounting records. The same is also true of Finnish accounting. The Finnish Accounting Act 1336/1997 prescribes in Chapter 1 Section 2 that every operation is reflected on one account’s debit side and the corresponding account’s credit side.

Once the postings of transactions are completed, a numerical check of arithmetical accuracy should be performed. This is referred to by Black (2009, 29-30) as preparing a trial balance. A rule of thumb when preparing a trial balance would be the following:

“Notice that total debits equal total credits in the trial balance.” (Antle & Garstka 2002, 41.)

At the following stage of an accounting process, some adjustments need to be made in order to comply with certain accounting concepts (Chadwick 1996, 31). It should be marked that accounting policies do differ from country to country. So these adjusting entries are always country-specific. The three major types of adjusting entries are accruals, deferrals and depreciation. Accruals and deferrals are transactions required to fulfil the main principle of accrual accounting, which separates the measurement of
revenues and expenses from the receipt and expenditure of cash. (Antle & Garstka, 2002, 56.) Depreciation is classified as a long-term deferral. It allocates the cost of an asset over its useful time. (Harrison, Horngren, Thomas & Suwardy 2011, 138-142, 416.)

Once the adjustments are ready, it is time to proceed to the period closing. Harrison et al (2011, 164) define period closing or closing the books as the process of preparing accounts for the next period’s transactions. They classify accounts into temporary and permanent accounts. The former include Revenue, Expense and Dividend accounts; the latter are comprised of Assets, Liabilities and Equity accounts. The temporary accounts relate to a limited time frame and their balances are zero at the beginning of each new period. The data is transferred to permanent accounts during the closing procedure.

The fourth stage of an accounting process is communicating financial information to internal and external users. The accounting data is reported using specified forms in order to permit informed judgements by users of information (Black 2009, 2). This entails issuing main financial reports such as: Income Statement, Balance Sheet and Statement of Cash flow. In Figure 8 Harrison et al (2011, 15) emphasise that the order is important due to information flow.

Figure 8. Order of preparing financial statements. Adopted from Harrison et al (2011, 15).

The authors include in the sequence Statement of Changes in Equity, which is an IFRS specific item. In the US GAAP, for example, the same report is called Statement of Retained Earnings.
The accounting process arguably ends at this stage. Authors who present a broader view on the process, however, include auditing as its final stage. As defined by Harrison et al (2011, 238), audit is a periodic inspection of an organisation's financial statements and accounting systems. Chapter 6 of this thesis will deeper approach auditing and its role for the stakeholders.

The issue which has not yet been discussed is the time span. An accounting process could be studied on several periodic levels: daily, monthly, quarterly, yearly, etc. The first four stages could be studied on any chosen time period. The only exception is the auditing process: auditing is normally done on an annual basis.

3.2 Legal obligation to perform accounting

The Finnish Accounting Act (1336/1997) in Chapter 1, Section 1 prescribes that even small-scale organisations that are doing business in Finland are obliged to perform accounting. Consequently, the student union X is liable to do accounting. The Accounting Act further specifies in Chapter 1, Section 2 that a financial year has to be chosen and should be equal to 12 calendar months. The financial year, also referred to as fiscal or budget year is a period that a company uses for calculating its financial statements (Tomperi 2011b, 13). The student union X’s rules define the union’s financial year to be a calendar year, that is from January, 1st to December, 31st.

3.3 Current accounting process and its costs in case company

For the purpose of understanding how the existing accounting process in case company works, a meeting with the Secretary General of the union was held. During this session he described in detail what the procedure is like and how much it costs for the company. It should be specified at this point that although most of the accounting process was outsourced to a service provider, the case company still faced a lot of challenges in implementing the initial steps of the process.

According to the secretary’s words, the union has been experiencing difficulties with accounting for many years. As the secretary conveyed, he has been holding his position
for half a year. When he took the office, the union’s accounting “documentation was a mess” - some of it was damaged, partly or completely missing. Basically, it was not possible to restore some of the purchase and sales invoices and other papers from previous years.

By the time of the first meeting, which was in February 2013, the accounting service provider was only finalizing union’s accounting for the year 2011. So the company’s accounting was not kept up-to-date. This made it impossible for the administration of the union to have a clear picture of its current financial situation.

So the accounting process of the case company would start with searching for documentation which the accounting service provider required. The existing documentation would then be delivered to the service company. This would be normally followed by lengthy phone calls and meetings with an accountant to find out the nature of financial transactions, when supporting documentation was missing.

“Once I was asked where 3,000€ came to the union’s account. I had nothing to say…” (Secretary General. 26 Feb 2013.)

Finally, the union would receive considerable bills for accounting services, including fees for extra-work hours and fees for delayed documentation. The Figure 9 below summarizes the accounting process of the case company in one picture.

Figure 9. Current accounting process in student union X
At the succeeding auditing stage, inquiries from auditors take place and as a result undesirable marks appear in the auditing reports. As accounting and auditing are addressed separately in this project, the auditing is studied further under project task 4 in Chapter 6.

The current accounting costs of the union X reach 10,000 euros per year. Which makes it around 833 euros on a monthly basis. The auditing service costs the union about 3,000 euros per audit (per audited year). The objectives to decrease costs were set as follows:

Table 1. The scheduled values of accounting and auditing costs of student union X

<table>
<thead>
<tr>
<th>Type of expense</th>
<th>Current value</th>
<th>Target value</th>
<th>% decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting costs</td>
<td>10 000 EUR per year</td>
<td>5 000 EUR per year</td>
<td>50%</td>
</tr>
<tr>
<td>Auditing costs</td>
<td>3 000 EUR per audited year</td>
<td>500 EUR per audited year</td>
<td>about 80%</td>
</tr>
</tbody>
</table>

As shown in Table 1, the accounting costs were budgeted to be half of their current value. Auditing costs were expected to be reduced 6 times of their present value. There were 2 factors influencing the target values. The desired values were set by the commissioning party based on benchmarking the company X’s costs to those of other student unions in Finland and union X’s budget planning for the following years.
4 Scenarios (PT2)

The cost-cutting scenarios for the case company were generated based on the following information:

- theoretical research data
- empirical research data
- brainstorming
- discussions with the case company.

The Attachment 4 offers an illustrative representation of these scenarios as different cost-cutting alternatives for the case company. As the findings revealed, an absolute prerequisite for successful implementation of each alternative is improving the current accounting process in the case company. In Attachment 4 it is referred to in the subprocess section. That is why before proceeding to presenting each specific scenario, the author sees the importance of discussing improvements in the existing accounting process in the student union X.

4.1 Improving current accounting process

An integral element to successful implementation of each scenario is improving case company’s accounting process. It is referred to as a sub-process in Attachment 4, because it comes along with all the proposed scenarios. When comparing the theoretical description of a proper accounting process with the current process of the union, significant inconsistencies arise. It is clear that accounting of the case company is not kept up-to-date. This has two major implications: increased accounting costs and lack of managerial control. Improving these two matters would be the first recommendations for the commissioning party.

Figure 10 places the current accounting process of the case company described in Figure 9, within the theoretical framework from Figure 8. Recalling the stages of an accounting process from the theoretical section, only part of the first stage is currently done by the commissioning party. Specifically, identifying business transactions and
collecting documents. The rest of the process, starting from recording transactions into the system to reporting are outsourced. In practice this means that the case company can directly influence the flow of the entire accounting process by improving its performance at Stage 1.

Figure 10. Juxtaposition of the actual accounting process in the case company and its theoretical stages

**Optimizing accounting costs**

Before making any further judgements and proposals, the author had to investigate the nature of the accounting costs. In order to do that the researcher was provided with the invoices that the union has received from the accounting service provider and the Agreement.

In Finnish law, there is a concept of freedom of contract, which encompasses several elements, among which are freedom to decide the content of a contract and absence of formal requirements (Surakka 2012, 50-51). In other words, the official contract template does not exist. The author examined that contract in detail and it seemed to be comprehensive and clear.

The Agreement between the student union X and the accounting service provider contained all the information that a traditional agreement would normally contain (Taloushallintoliitto 2009):
− the parties of the agreement
− the subject of the agreement and specification of services performed
− the validity time
− terms and conditions
− signatures of both parties.

The analysis of the contract revealed that the union has been acting against the agreed rules and was therefore charged higher prices than originally arranged. It was indicated in the Agreement that the supporting documentation has to be delivered in full to the union’s accountant within 30 days after the end of the month. The union’s documentation was, nevertheless, missing or delayed quite often. This resulted in extra hours spent by the accountant investigating if the documentation exists and trying to get hold of the absent information. Based on the analysed invoices, in 2012 the extra hours have added on average 25 percent to a monthly bill.

The Finnish Accounting Act (1336/1997) in Chapter 1, Section 5 prescribes that all the accounting transactions are to be based on a dated and numbered supporting document that authenticates the transaction. So in case with the student union X, absence of documentation is not only increasing accounting expenses, but is also considered illegal.

Hence, the principal improvement suggestion for the commissioning party is to collect and store all the accounting documentation for further reference. Had the information been available and delivered to the accounting service provider in full and without delays, this would immediately cut the monthly accounting costs by roughly 25 percent.

Though it may sound simple, in practice the issue is more complicated. Mainly due to the fact that many employees of the company are involved in the process to some extent. An example of party ticket sales will be introduced at this stage to illustrate the challenges involved with the process.
The sales points of the student union are located in several campuses of the University and there has been no coordinator so far. Tutors of the union are in charge of the ticket sales, however they have been often unable to report the exact amount of tickets sold. This makes it problematic to verify how much money the union has actually earned and if all the funds raised on ticket sales have been submitted in full to the head office. The fact that payments are mostly done by cash is adding to the difficulties.

According to Taloushallintoliitto (2011) webpages, which represent official accounting requirements for Finnish companies, if an organisation has cash operations it is required to fill in a cashbook. A cashbook serves as a statement containing all the cash transactions, which should be recorded daily (or on exact days when cash transactions take place). So the author’s second suggestion would be to start using a cashbook to keep a record on the cash transactions.

It all comes down to another suggestion that tutors and all people involved in sales have to be thoroughly instructed. A clear understanding of the importance of documenting the number of sold items and the money received has to be established. One development idea is to create a set of rules of how to treat issues related to accounting and distribute it among the union’s employees and tutors. Aside from recording sales transactions rules could include policies on storing purchase invoices and other papers and bills related to the union’s operations.

Personnel rotation is inherent in student unions: most of the workers are students, who tend to leave the union once they graduate. So a set of written rules would help to quickly educate the union’s newcomers and avoid missing accounting documentation.

**Improving managerial control**

Improved managerial control does not directly influence the accounting costs of the union. Nevertheless, it assists the management of the company in making more informed decisions for the successful development of the student union X. Collecting the latest accounting information would not only help to minimize accounting costs, but also better serve managerial purposes. For the sustainable development of the un-
ion it is essential to understand the current financial situation. For that reason, a new practice of dealing with managerial accounting issues has to be established.

In one of the appointments, the Secretary General stated that one of the union’s problems was lack of information on revenue and expense generating activities. Namely the lack of understanding where the money comes from and how it is spent. An example that the union’s secretary gave me will clarify the idea.

Some portion of the union’s revenue is produced through student membership fees. A student may choose to subscribe for the union’s membership for only one semester or the whole period of studies, which is normally around 7 semesters. (Case company’s webpages 2013.) If a student decides to subscribe for 2 or more semesters, the fee would normally be paid in full on the date of subscription. The challenge for the union’s management is then to ensure that financial resources are allocated correctly to different semesters and are not spent at once.

In order to address this problem, a concept of revenue recognition is introduced. Revenue recognition issues are believed to be the most important and complex challenges that companies face (PriceWaterhouseCoopers 2012). Harrison et al (2011, 137-140) write that the accrual accounting principle lies as a basis for revenue recognition.

“Accrual accounting records the impact of a business transaction as it occurs.” (Harrison et al 2011, 137.)

The authors also distinguish between the moment when cash is paid or received and the moment when the actual transaction is recorded.

In the earlier example with the membership fees, the entire revenue from the transaction should not be recognised at once when the payment is received. According to the revenue recognition principle described by Harrison et al (2011, 139), the proceeds of the transaction should be equally divided between the membership periods. Practically in accounting that would mean the following.
Let’s assume that the subscription fee is 35 EUR per semester. A student decides to subscribe for the whole period of his/her studies, which is estimated to be 3.5 years, which equals to 7 semesters.

**Current situation in the union**
The revenue from a 7-semester membership is recognised when money is received and equals to 35 EUR* 7 = 245 EUR

<table>
<thead>
<tr>
<th>Cash/Bank</th>
<th>Revenue from membership fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>245 EUR</td>
<td>245 EUR</td>
</tr>
</tbody>
</table>

**In accrual accounting**
The accrued revenue would gradually be recorded as Revenue from membership fees, once every new pre-paid semester starts.

<table>
<thead>
<tr>
<th>Cash/Bank</th>
<th>Revenue from membership fees</th>
<th>Accrued revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>245 EUR</td>
<td>35 EUR</td>
<td>210 EUR</td>
</tr>
</tbody>
</table>

Using accrual accounting presents a more realistic picture of revenue generated through different activities. The same approach could be applied to dealing with expenses. This would be done according to the matching principle described by Harrison et al (2011, 140) as the basis for recording and recognizing expenses. However in order to be able to utilize accrual accounting, all the business transactions have to be carefully followed and all the documentation should be in place. This would improve control over the use of the union’s funds and help the company’s management better understand the company’s needs.
Summary
The suggestions presented in subchapters 4.1.1 and 4.1.2 are summarised as follows:

− Carefully collecting and storing all documentation for further reference.
− Starting to use a cash book to record cash transactions.
− Create a set of written rules to educate employees about the basic accounting requirements.
− Using accrual accounting to recognise revenues and expenses.

4.2 Outsourcing accounting

Figure 11 presents an extract from Attachment 4. As it is clear from the figure, the focus of this section of the thesis would be on outsourcing accounting scenarios. Firstly, the alternative of staying with the current accounting service provider and VAT registration is discussed.
In one of the interviews, the Secretary General mentioned that the union is not a VAT registered entity. This incited a further research into a possibility of becoming VAT registered.

According to the Finnish Value Added Tax Act (1993/1501), Chapter 2, Section 4 the student unions in Finland are not obliged to be VAT registered. Though, VAT registration could be done on voluntary basis. The case company is not VAT registered in Finland, so the VAT on accounting services, which is currently set at the rate of 24 percent (Finnish Tax Authorities 2013), is a direct expense for the union. The VAT rates in Finland have increased as of January 2013 and currently they set as presented in the following table.

Table 2. VAT rates in Finland (Verohallinto 2013)

<table>
<thead>
<tr>
<th>Rate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24%</td>
<td>Standard rate, applied to the majority of goods and services</td>
</tr>
<tr>
<td>14%</td>
<td>Reduced rate on foodstuff and animal feed, restaurant services</td>
</tr>
<tr>
<td>10%</td>
<td>Reduced rate on books, pharmaceuticals, transportation, sports activities, cultural service, etc.</td>
</tr>
<tr>
<td>0%</td>
<td>VAT exempt are social welfare services, medical care, education, insurance and some others</td>
</tr>
</tbody>
</table>

During one of the meetings with the secretary, a possibility of VAT registration for the union was discussed. In that case the union would have been able to get a VAT return for the purchase of accounting services. For that a periodic tax return for would have to be filled in. The example form is in Attachment 3.

“Periodic tax return is a notice, through which the taxpayer gives details on self-initiated taxes, as necessary for purposes of tax control.” (Verohallinto 2011.)

On the other hand, VAT would also be added to items that the union is selling. That would consequently lead to the increased prices to students, which is not what the company desires.
An example below will illustrate in numerical values the difference between being VAT registered and being not. Let’s assume that the union received a monthly bill for accounting services worth 550EUR. According to the current VAT rates in Finland a 24 percent service VAT would be added to that bill by the service provider.

\[ 550 \text{ EUR} \times 0.24 = 132 \text{ EUR} \text{ is the VAT part} \]

The entire bill will then be

\[ 550 \text{ EUR} + 132 \text{ EUR} = 682 \text{ EUR} \]

As the student union X is not VAT registered, it cannot claim any VAT back and the entire 682 EUR bill will be recognised as an expense and paid in full.

One of the possible cost-saving options for the union X would be to register for VAT. In that case, the company will have a possibility to get a refund equal to the 24 percent VAT. In practice this means that the invoice is paid in full amount to the accounting service provider, however the 132 euros could then be claimed back as a VAT return.

In a scenario like this, the direct expense for accounting services would only 550 euros, compared to 682 euros in the previous case. On a monthly basis the VAT registration would save 132 euros on accounting services, but calculated on a yearly basis it already makes about 1500 euros savings (assuming that the average monthly bill remains constant). Expressed as a percentage, the gain would equal to the service VAT rate and be 24 percent. This does not quite match the target decrease of 50 percent on accounting costs. However if combined with the improved internal accounting process, the savings could be intensified.

The picture of VAT registration possibility for the case company would not be complete without discussing the other side of the issue – adding VAT on sales. Under the Finnish VAT Act (1993/1501), the VAT registered union would have to add 24 percent tax on the items it sells.
Currently the union is not adding any VAT on sales and thus has managed to keep prices for students at fairly low levels. Yet if the case company decides to register and claim VAT on accounting services back, this will have an impact on prices for students, which will increase by the respective VAT percentage. The standard 24 percent rate will be applied on most of the items which the union is selling, a reduced 10 percent rate will be used for newspaper subscriptions.

Since the union is primary acting in the interests of students (Student union X’s rules 2011 and Universities Act (558/2009) in Chapter 5 Section 46), the Secretary General decided that becoming VAT registered is not the best solution for the union’s accounting problem.

### 4.3 Changing the accounting service provider

This section of the thesis explores another outsourcing possibility, but unlike the previous scenario, an alternative of changing the service provider is presented.
Axelsson and Wynstra (2002, 5-24) characterise the 21st century as time, when most organizations are moving towards buying business services mostly due to specialisation and division of labour. They list reasons that have been driving companies to supplement their internal resources by purchasing services:

- lack of capabilities to perform a service effectively and with the right quality or
- insufficient scale or ability to perform a service cost efficiently or
- inadequate capacity.

So, when an organisation lacks the required knowledge, expertise or manpower to perform a specific function it typically hires an outside service provider. This situation is known as outsourcing. As defined by Axelsson and Wynstra (2002, 67) outsourcing of services refers to a decision and a subsequent transfer process by which activities that could be performed within a company are instead purchased from an external supplier.

An accounting service provider is a company or a person, who performs accounting on behalf of the customer. The case company has been using services of such a provider for the past several years, so the major part of the union’s accounting process has been outsourced. For some reason the commissioning party has not been considering switching to a new accounting service provider. At first the Secretary General motivated this decision by being satisfied with the current service provider. However later he was more inclining towards the insourcing accounting option. This has greatly influenced the focus of the research: more emphasis was put into exploring the insourcing alternative.

Nevertheless in this project, the author has reviewed a list of major accounting firms on the Finnish market and checked the prices they offer. The main source of information was Internet and companies’ websites. For the purpose of getting a quote, the author contacted several sales representatives.

The results of the research revealed that the current accounting service provider was charging a relatively high price, compared to what other companies on the market were
offering. According to research findings the following aspects, individually or combined, have an influence on the price charged for accounting services:

- basic monthly rate of a service provider company
- working hours of an accountant (and extra work)
- number of bookings into the system
- number of employees for whom salary is calculated
- types of reports to be produced

The factors having an impact on the price are located under the two categories: the ones that can be influenced by the case company and the others, which cannot be changed. The first criterion, the monthly rate, often varied in direct proportion to the provider’s size and reputation, according to the research findings. The bigger and the more famous the company was, the higher basic price it would charge. Similarly the hourly rate of an accountant and possible extra-work hours charge tend to be higher in more respected companies. The last three factors are beyond control of the case company, because they are either fixed or regulated by law.

If all other things remained constant, the commissioning party could have saved at least 20 percent of its monthly accounting expenses by changing to a cheaper accounting service provider, with a lower monthly rate. Had all the documentation been collected according to the suggestions presented in the earlier chapter, the savings could have been even greater.

### 4.4 Insourcing accounting option

The previous subchapter concerned outsourcing – a concept that companies are contracting out activities and functions to the third parties. According to Axelsson and Wynstra (2002, 70), the process can also go in the opposite direction, when activities and functions are insourced, i.e. done within the company. As illustrated in Figure 13, this subchapter will focus on the insourcing alternative as a means of decreasing accounting costs.
Figure 13. Decreasing accounting costs by insourcing accounting

Axelsson and Wynstra (2002, 71) continue by presenting advantages and disadvantages of outsourcing, which are summarised in Table 3.

Table 3. Advantages and disadvantages of service outsourcing. Adopted from Axelsson and Wynstra (2002, 71)

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company can focus on core operations</td>
<td>Increased dependence on suppliers</td>
</tr>
<tr>
<td>Optimal usage of knowledge, equipment and experience of the third party</td>
<td>Monitoring of the costs related to the service provider and need to manage supplier relationship</td>
</tr>
<tr>
<td>Easier and more obvious primary process in organisation</td>
<td>Risk of communication and organizational problems during the transfer of activities</td>
</tr>
<tr>
<td>Diversion of risks</td>
<td>Leakage of confidential information, other potential legal and social issues</td>
</tr>
</tbody>
</table>
The above listed advantages and disadvantages of outsourcing can be interpreted as benefits and obstacles of insourcing respectively. Although Table 3 is a generalization made for business services, it can be applied for accounting services in particular.

As specified earlier in this chapter, the major part of the current accounting process is outsourced to the accounting service provider. So one possibility to reduce accounting costs would be to perform accounting in-house. Doing accounting in-house means that there is an employee in the company, usually an accountant or a bookkeeper, who is recording accounting transactions and is responsible for the accounting process. It should be noted that whether or not auditing is included in the accounting process, it is always performed by an external specialist, not the company’s accountant (Frederick & Gary 2011, 1).

In order to insource accounting, two elements are required – workforce and a tool (Figure 14). When the personnel resources are concerned, the case company could choose between hiring a part-time accountant and managing it with the existing manpower. As for the tool, an accounting software has to be selected.

![Figure 14. Prerequisites for insourcing accounting](image)

It should be pointed out at this stage, that the insourcing scenario (using existing employee as an accountant) was chosen to be implemented in the union’s operations. This streamlined the further course of the project.
Some small companies, whose accounting is not too complicated and volume are using Excel as a primary tool for managing financial data. However, the Secretary General of the union desired that “a proper accounting software is to be chosen”. This incited a deeper research on the accounting software, being the next step of the project.
5 Digital accounting and accounting software selection (PT3)

This chapter focuses on the third project objective, which is to explore the scenario selected by the commissioning party. The case company has decided to choose the insourcing alternative and bring their accounting in-house. In order to explore the given option, the concept of digital accounting should be discussed first to provide the necessary background for software selection.

5.1 Digital Accounting

Deshmukh (2006, 2) refers to accounting as a lagging science. What he means is that accounting is reactive - it responds to developments in business and technology. The author traces the roots of digital accounting back to 1950s, when companies around the world started to realise that accounting and financial information due to its heavy volume and repetitive nature became the main candidate for automation. The advent of Internet and advances in IT enabled and, in many ways accelerated, the development of digital accounting. So digital accounting defined is representation, processing and communication of accounting information in digital format (Deshmukh 2006, 1; Lahti & Salminen 2008, 19).

5.1.1 Costs and benefits

At this point the author sees the importance of introducing costs and benefits associated with e-accounting. It is worth pointing out that seven years have passed since the publication of the Digital Accounting book (2006) based on which the table below has been created. This implies that some changes have for sure occurred. The author assumes that they mostly concern the costs of digital accounting. As it has happened with most of the innovations, in the very incipient stage of their development the price was tremendous. For example when first flat screen TVs (Liquid-crystal-display TV) were introduced the price was so high that only the most affluent customers could have one. LCD televisions gained momentum in the early 2000s when they were widely presented on the market by different producers. By present times the price on those TVs has declined so substantially that they became affordable to almost everyone in...
the developed countries. Other inventions like cars, computers, cell phones have followed merely the same pattern in their development.

Drawing a parallel with technology, the seven-year period is rather long for digital accounting. This means that dramatic decrease in costs of software and consultancy due to progress and increased completion on the market are very likely to have occurred.

Table 4 aims at summarising the costs and benefits of digital accounting from several sources. Among the major expenses the authors specify initial investments, consulting fees and personnel training. On the other hand, the key benefits include increased speed of processing information, reduced amount of errors and improved efficiency of the processes.


<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments in computer hardware and software</td>
<td>Faster cycle times: posting of transactions, closing the books and reporting</td>
</tr>
<tr>
<td>Initial need for expensive consultants</td>
<td>Broader geographic reach</td>
</tr>
<tr>
<td>Costs related to systems, processes and report generation changes</td>
<td>Service availability 24/7</td>
</tr>
<tr>
<td>Continuous training of personnel to obtain the required new skills</td>
<td>Reduced accounting staff and greater productivity</td>
</tr>
<tr>
<td>User resistance</td>
<td>Reduced error rates</td>
</tr>
<tr>
<td>Potential security, control and audit requirements issues</td>
<td>Cost savings in mail, paper and storage</td>
</tr>
<tr>
<td></td>
<td>More ecological solution</td>
</tr>
<tr>
<td></td>
<td>Improved control and security</td>
</tr>
</tbody>
</table>

When presenting the list of costs and benefits of digital accounting, Deshmukh (2006, 10-12) makes a remark that accurate quantification of both is elusive, because it is based on a variety of complex interdependent factors. In Finland, the Real Time Economy Competence Center is engaged in promotion of electronic technologies for
businesses. They have made an attempt to quantify the potential of digital accounting to decrease administrative costs by 50 percent. (Real Time Economy Competence Center 2012a.)

The Real Time Economy is a joint project of Tieto, Aditra and Aalto University School of Business. They have so far had four projects, all concentrated around automation of business processes. The SME 50 is the name of their 5th project, which explored potential of reducing the administrative burden of SMEs by 50 percent by means of value chain computerization and related services. The project embraces four modules, one of which is Automated Financial Administration. This specific module explores the ways to use structured data to automate accounting and cash flows of SMEs. This is where the concept of digital accounting is applicable. (Real Time Economy Competence Center 2012b.) Although it is be too extensive to say that digital accounting alone is capable of saving 50 percent of administrative cost, but it is certainly a fundamental component.

5.1.2 Development of digital accounting in Finland

Interestingly, Deshmukh (2006, 1) refers to e-accounting as a “corresponding analogue” of digital accounting and uses the terms synonymously. Lahti and Salminen (2008, 21-22) conversely state that there is a significant difference between the two terms. They refer to e-accounting as a precursor of digital accounting. An example that the authors introduce deals with invoices. If a sender delivers a paper invoice to the receiver, who in turn scans it to transform in electronic format, we are speaking about e-accounting. In digital accounting, the invoices would be sent and received as e-invoices, eliminating any paper component. For instance, processing PDF files is not considered digital accounting.

The e-accounting differs greatly from its predecessor, paperless accounting. By paperless accounting Lahti and Salminen (2008, 22) refer to electronic representation of legal documents. Although digital accounting is also paperless, the important thing is that in paperless accounting, the documents are transferred to electronic format after laborious and manual work, for example by scanning. Figure 15 below places paperless, e-
and digital accounting in chronological order according to their development order in Finland.

Figure 15. Development of digital accounting in Finland. Adopted from Lahti and Salminen (2008, 22).

5.2 Selection of an accounting software

One of the possible scenarios to decrease accounting costs of the case company is doing accounting in-house. As described earlier, this requires a person (an accountant) and a tool (an accounting software). As for the accountant, the Finnish legislation does not regulate that an employee responsible for company's accounting has to have any specific academic degree. This means, that whoever in the case organisation is capable of doing accounting, could function as an accountant. When it comes to the software, a thorough approach to selecting a software has to be taken. For a start, below is a definition.

“The term accounting software denotes software that handles accounting and perhaps finance functions.” Deshmukh (2006, 27.)

It was decided with the union’s secretary that accounting software is required to perform accounting in-house. Another possible option would have been using Excel. However, considering the volume of bookings and transactions, the union’s administration was willing to invest in a specialised accounting software.
An important issue to point out at this point is the demarcation process for selecting the accounting software. Within this project only the most contemporary and modern software options have been studied, leaving the outdated software out of scope of the research. The two main criteria were employed to make the selection: the software should be digital and use cloud services.

5.3 Theoretical background

As the results of a theoretical study revealed, there are only a few existing classifications of accounting software. Besides, the authors are using different approaches and criteria for grouping the software. One classification is presented by Deshmukh (2006, 27-29) and is summarised by the thesis author in Table 5. The size of a business serves as a main criterion.

The accounting software is basically divided under three categories: the lower level, middle level and high level. These groups directly represent the organisations they are targeting by size. The companies’ expectations and requests for the accounting software vary according to the scale of the business, so do software costs and features.

Table 5. Software levels and their features summarised from Deshmukh (2006, 27-29)

<table>
<thead>
<tr>
<th>Level</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower level (home/small, small businesses)</td>
<td>Standard accounting modules: transaction entries, payroll, limited number of users, database embedded in software. Characterised by low cost.</td>
</tr>
<tr>
<td>Middle level (mid-size companies)</td>
<td>Full accounting package with industry-specific modules, electronic solutions. Supports multiple users and might have both embedded database or work with any existing database. Expensive.</td>
</tr>
<tr>
<td>High level (large corporations and multinationals)</td>
<td>ERP packages for managing cross functional tasks. Extremely expensive and requires up to several years to integrate and make operational.</td>
</tr>
</tbody>
</table>
Deshmukh (2006, 28-30) presents other authors’ approaches to classifying accounting software:

- **Vertical Accounting**, where accounting solutions are created to address the needs of a specific industry.
- **Add-on Products**, which perform particular functions and supplement the existing accounting packages.
- **Horizontal Accounting**, which is a dominant trend in contemporary accounting and offers solutions for multiple industries.

### 5.4 Classification of accounting software

Deshmukh (2006, 27-32) proposes classification of accounting software, which is based on the size of the business. The author has utilized this approach in creating a classification of accounting software tailored to the Finnish market (Attachment 5). The size of the business can, however, be measured by diverse parameters: revenue, number of employees, amount of transactions. When conducting this research, the author tried to combine all of these measurements, as they have had a collective influence on selection of accounting software.

#### 5.4.1 Accounting software for a small business

It should be noted that a universal definition of a small business does not exist. As stated earlier, different measurement could be applied to evaluate the size of a business. A revenue parameter was not quite applicable in the setup of this project, because profit generation is not the primary goal of the case company. For that reason, the author used number of employee as the determining criterion. So a small business in this research is an organisation having up to ten employees.

#### Free accounting software

Since the main project objective is decreasing accounting costs, the author has first investigated free accounting software. The following options were found.
Dooranet
While searching for free accounting software solutions, the author came across an advertisement on one of the financial forums. It introduced a program called Dooranet, which was claimed to be free. However as it turned out the application was still under development and had a limited amount of functionalities. For example payroll system, which was one of the software requirements of the case company, was not incorporated into that software. According to the information on the company’s website (Dooranet 2012) the software also had a limited number of purchase and sales invoices that it could handle, as well as a restricted amount of bookings per month. There was a risk that the software would not be able to process all the case company’s transactions due to its limited capacity. Broader versions of the software were only available for purchase, for the prices ranging from 15 EUR-54 EUR/month.

International free software
Several free software designed in the UK have also been found. For the purpose of testing the programs, the thesis author downloaded and tried two of them. The software were quite simple and incorporated all the basic functions. A major drawback was nevertheless detected. The software was not suitable for Finnish companies as it violated the local accounting law. As laid down in the Accounting Act in Chapter 3 Section 5, Finnish companies have to use local languages – Finnish or Swedish and local currency – euros (EUR) in their financial statements. As for the language, this software could have been suitable, because it is possible to perform accounting in English and then translate the financial statements into the local languages. However, the software’s settings only allowed British pound sterling (GBP) to be set as the transaction currency. That’s why these software options were not suitable for the case company.

Basic software
A good example of a very basic and cheap software available on the Finnish market is E-economic. The software is Internet based and offers a standard set of functionalities: accounting, accounts payables, accounts receivables, invoicing and basic reporting. The software is offered in two modifications: Small Business, limited to 4 000 transactions per year, and Professional which has an unrestricted amount of transactions. The Small
Business version costs **21** euros/month and the more extended Professional option is **42** euros/month. Prices do not include VAT. (E-conomic 2013.)

The author has contacted a sales-representative of the company to find out more about the software’s price and features. The company’s representative assured that there are no other hidden costs, like license payments or anything similar. However, payroll functionality was not included in the E-conomic software package. Nor could it be purchased directly from the supplier. The only solution was to use services of Hogia Payroll System, which could be integrated in the software.

As advised, the thesis author contacted Hogia’s sales-representative in order to discover the price of using their payroll system. It was found out the price varied depending on the number of employees. For the case company specifically it would have been 250 euros for purchasing a license (paid only once) and 212 euros/year.

If combined, E-conomic and the payroll functionality would cost the commissioning party 39 euros/month if transactions do not exceed the 4 000 limit and 60 euros/month for an unlimited version. Plus a 250 euros investment in purchasing a license.

**Summary**

Several other free software of a similar type are accessible on the Internet. However the reliability of an accounting system and safety of financial information are issues to be considered first when making a decision. The majority of free accounting software are developing application. As a consequence, there is high probability of information risk and erroneous representation of financial information. The commissioning party demanded a decent tool to manage their accounting that is why free software options were not considered in the final selection. A basic software option, the E-conomic software with integrated Hogia payroll system was selected as one software alternative for the case company.
5.4.2 Software for a medium-sized business

Similarly to the definition of a small business, the meaning of a medium size business is quite vague. Applying the same principle – number of employees, a medium size business in the context of this project is defined as having from ten (10) to a hundred (100) workers. Therefore, the software requirements become more demanding.

More sophisticated software suitable for mid-size businesses, offer a greater variety of functions and remove limitations on the number of transactions and invoices that it can process. Most of the advanced software propose the following features on top of the basic functionalities: Inventory and Warehouse Follow-up, Project Management, Tender processing, Customer Relationship Management, etc.

As defined earlier in this chapter, digital accounting refers to digital representation and automated handling of numerical data. Consequently, digital accounting software is a tool for doing that. Most of the contemporary software could be termed digital.

Figure 16. Cloud services explained

A distinctive feature of contemporary accounting software for mid-size businesses is that they are mostly using cloud services (Figure 16): the software is not directly downloaded to a computer, but access to it is provided through operator’s server. Practically
this means that the software could be accessed from any computer (or even a cell phone), anywhere in the world. An irreplaceable component to make this possible is Internet connection. This has brought many advantages: flexible workplace, automatic updates, constant access to the information. Another benefit of this type of software is information security. In other words, in case of user’s system breakdown or damage of a computer, all the information is safely stored in digital format. The regulations in the Finnish Accounting Act (Chapter 2, Section 8) foster these innovations by allowing storage of financial information in electronic format. Among considerable disadvantages are problems with internet connection.

The role of the accounting software for businesses has changed during the past years. Today they serve as a mediator between a company using it and other types of organisations as visualized in Figure 17. Advanced software enable the user-company to interact with banks (by means of payment processing), exchange electronic invoices, and deliver its financial information digitally directly to authorities (e.g. tax authorities).

![Diagram](image.png)

Figure 17. Accounting software as a mediator

**Summary**

Digital software for mid-size businesses in Finland are offered by such providers as NetBaron, ProCountor, Netvisor, EmCe and others. The operational model as well as
functionalities are more or less similar. What differentiates them is basically user interface and some minor aspects. All of the software providers listed above offer varied packages, depending on the business needs. The most suitable packages were examined and proposed for the case company.

5.4.3 Complex accounting software integrated into ERP systems

Complex accounting software integrated into ERP systems are international level applications. These stand on the higher level of the accounting software hierarchy. ERPs are most suitable for large-scale corporations, defined in this research as having more than a hundred (100) employees.

The term ERP originated in 1990s and refers to enterprise-wide systems to manage all sorts of data, such as: supply chain, inventory management, customer order management, production planning, accounting, HR and other business functions (Sumner 2005, 2; Deshmukh 2006, 24).

“Enterprise resource planning systems are a major investment.” (Sumner 2005, 1.)

ERPs are timely and costly to implement, however the anticipated benefits to companies are enormous. The advantages of using an ERP system are summarised by Sumner (2005, 6-13): improved information response times, increased interaction across enterprise, improved order management, decreased financial closing cycle, improved interaction with customers, reduced direct operating costs, etc.

Figure 18 presents major providers of ERP software measured by market share according to Forbes (2013). As it is clear from the pie chart, SAP and Oracle are the major players.
Remarkably, not much has changed since 2006, when Deshmukh (2006, 27-29) listed SAP and Oracle as the leading ERP providers. The two companies are still holding the principal positions. That is why the author of the thesis has selected these two examples to address in more detail.

**SAP**

SAP AG (Germany) is the world’s leading provider of enterprise software and related solutions. It has a 40-year long history and is now operating in more than 130 countries. SAP offers a variety of products and services for businesses ranging from small to multinational, but the specific focus will be on SAP ERP. (SAP 2013.)

SAP ERP aims at providing a business with a fully integrated software package. It is comprised of several modules including: marketing and sales, production and inventory follow-up, product design and development, HR, finance and accounting. Data from these modules is combined to deliver an organisation a tool called enterprise resource planning. In case of a proper implementation, the anticipated benefits are improved business processes, decreased inventory and lead times. In spite of all the implementation difficulties and associated costs, the benefits for the organisation could be enormous. (SAP 2012.)
Oracle

The Oracle Corporation (USA) is one of the world’s largest computer technologies corporations, offering computer hardware and enterprise software products (ERP in particular). It is present in about 145 counties all over the world. The company expresses its main goal as follows: to eliminate complexity and simplify IT to accelerate innovation and created added value to their customers. (Oracle Corporation 2011.)

The underlying principles of Oracle ERP system are basically the same as in SAP ERP. The functional modules include Financials, Portfolio Management, Procurement, Government, Risk and Compliance (Oracle Corporation 2013). The potential benefits to ERP users as well as difficulties and costs incurred in instalment process are generally similar to those of SAP. This has led to intense competition between the two providers. (Deshmukh 2006, 26.)

Summary

ERP is seen as purely means of cutting costs (Norris, Hurley, Hartley, Dunleavy & Balls 2000, 12-14). However, not all implementations have been effective, as the main success factor is willingness of individuals to change and upgrade their own skills.

ERP systems are used by companies in a variety of industries nowadays. However none of the ERP software was selected for the final list of options for the commissioning party. The major reason is that the business of the union is too small to exploit the benefits that ERP systems can provide. To say more, the size of the business of the case company is not comparable in any way with the target customers of ERP providers. For this reason this option has not been considered further, but merely presented in the research to provide a complete picture of classification of the accounting software.

5.5 Selection

A good rule of thumb for selecting an accounting software is presented on webpages of Kirjanpitoa (2013). Below is a suggested list of questions to go through before choosing the accounting software provider and a software itself:
- How many software solutions has the company sold?
- For how long has the software provider operated in the market?
- Does the company provide updates for the software and how costly are they?
- Does the service provider offer a manual for the software?
- Is there any supportive information about the software?
- What kind of consulting services does the software provider offer?
- What software features is your company really going to use?
- Are there any additional fees applicable (e.g. monthly fees?)
- Does the provider offer a trial version of software?
- What kind of computer and operating system does the software require?

After a study of the accounting software had been conducted, it was time to proceed to the actual selection process. As the results of the research revealed, accounting software aiming at different company sizes have varied characteristics. Most of the examined software options were available in several modifications, customised for specific business scales. Commonly, software were available in formats like “Basic”, “Premium”, and “Flexible”. Each configuration allowed a specific amount of users, transactions, etc.

The research has also unveiled a contradiction: the author has to this point referred to accounting of the case company as simple and basic. However, the software requirements of the commissioning party did not fit into any of the basic software configurations. Most of the time, the amount of transactions and invoice number exceeded the limits of a simple software modification. Payroll system was not always included by default either.

As the outcome of the research, the list of factors influencing the price of software was created:

- Functionalities: payroll is not always considered a basic functionality.
- Number of employees, for whom payroll has to be calculated.
- Number of accounting entries.
- Number of purchase invoices.
- Number of sales invoices.
- Yearly turnover.

Having taken all the discussed factors into consideration, the author created a list of software options to be proposed for the case company. The selected software and their prices are available in Attachment 6. A Finnish version of this attachment was delivered to the Secretary General of the union on the 30th April. During the stakeholder meeting in May, Option 4 was selected. The software has been purchased and implemented.
6 Auditing (PT4)

Solving the Auditing Problem became the final part of the thesis project. According to the commissioning party’s administration, they were not satisfied with the current auditing costs, especially considering the fact that compared to other student unions the costs were several times higher. Hence the author’s task was to investigate the nature of the costs and make a proposal how to reduce them.

It is important to distinguish between internal and external audit at this stage. Elder, Beasley and Arens (2010, 820-821) state that otherwise similar, internal and external audit differ in one important way. The internal auditors are responsible to management and the board, while the external auditors are responsible to financial statements users, who expect auditors to add credibility to the financial statements. The focus of this project is on the external audit.

6.1 Auditing and its function

As described by Elder et al (2010, 4-6), auditing refers to accumulation and evaluation of financial information to determine and report whether the presented data properly reflects the economic events that occurred during the accounting period. A certified specialist conducting the audit is referred to as an auditor. Deloitte (2013) claim that auditing is an extremely complex process and highlight the role of an auditor in the financial reporting chain.

As stated in Chapter 1 Section 3 of the Finnish Auditing Act (459/2007) an auditor shall be a natural person or a firm, approved in accordance with the following criteria:

- not under guardianship
- not in bankruptcy
- not been barred from conducting business
- whose legal capacity has not been restricted.
“The role of the auditor has been described as being that of a watchdog, rather than a bloodhound.” (Chadwick 1996, 165.)

The main purpose of auditing based on Chadwick (1996, 165-166, 170) and Elder at al (2010, 6-18) could be summarized in Figure 19.

![Figure 19: Auditing functions. Modified from Chadwick (1996, 170) and Elder et al (2010, 6-18).](image)

The first function of auditing is to verify and report upon the financial situation of a company. In other words, to present a true and fair view and add credibility to the financial statements. (Chadwick 1996, 166; Troberg 2013, 183.) The second function is defined as detecting errors and fraud. As stated by Elder et al (2010, 16) these are the two types of misstatements in financial reports, where errors refer to unintentional misrepresentation of information whereas fraud is intentional. The authors continue that auditing also bears a preventive function. One of its purposes is to avert possible errors and fraud in financial statements.

Troberg (2013, 13-15) describes a typical situation in an organisation nowadays (see Figure 20): owners are separated from the managing body in most companies, so they can not follow the development of the organisation nor can they necessarily judge themselves the reliability of the financial statements. This is what laid the basis for the auditing profession.
Figure 20. The relationship between owners, management and the auditor. (Troberg 2013, 14)

6.2 Obligation to conduct an audit

According to the Finnish Patent and Registration Authority (2013), small companies and co-operatives do not bear an obligation to be audited, if not otherwise provided in the Articles of Association, Rules or Agreements of the organisation. In 2007 a new Finnish Auditing Act (459/2007) entered in force and exempted all smaller organisations from a liability to be audited (Section 4). Namely, organisations where not more than one of the following conditions were met in two past successive financial years:

- the balance sheet total exceeds 100,000 euros
- net sales or comparable revenue exceeds 200,000 euros
- the average number of employees exceeds three.

The case company does not fulfil the above criteria, so based on the regulations of the Finnish law, the union is not obliged to conduct an audit. However, in accordance with the case company’s rules (2011), an auditing report has to be submitted to the Representative Body of the union. This implies that the financial statements of the commissioning party nonetheless have to be audited.

This situation raises a question: Why audit? Even those companies that are not required to have an auditor still decide to audit their financial statement on a voluntary basis. It happens because the companies take into consideration their stakeholders,
who wish that the accuracy of the financial statements is verified. A company’s potential stakeholder groups are summarised in Figure 21.

![Figure 21. Company’s stakeholders. Modified from Tomperi (2011a, 7).](image)

### 6.3 Auditors and their classification in Finland

There is a two-tier system of auditors in Finland (Finnish Auditing Board 2013a):

- auditors and audit firms approved by the Auditing Board of the Central Chamber of Commerce, KHT (keskuskauppakamarin hyväksymä tilintarkastaja)
- auditors and audit firms approved by the Auditing Committee of a local Chamber of Commerce, HTM (kauppakamarin hyväksymä tilintarkastaja)

In addition to the general provisions on auditors laid down in Section 3 of The Finnish Auditing Acts (459/2007), a KHT auditor has to fulfill the following qualifications (Finnish Auditing Board 2013a):

- holds a higher university degree
- has completed studies necessary for the performance of auditing tasks
- has a minimum of 3 years of experience in demanding activities related to accounting and auditing
− has successfully passed a professional examination
− has given the auditor’s affirmation before the Court.

In order to be authorized as an HTM auditor, a person has to satisfy otherwise same criteria as a KHT auditor, for the exception of (Finnish Auditing Board 2013a):

− the educational level could be lower university or a polytechnic degree
− the professional examination is more concise

Both KHT and HTM auditors are specialists in the field. Some of them might, however, focus on specific business areas. The choice of an auditor or an auditing firm should normally be based on the degree of complexity of financial statements in question. All the authorized auditors and auditing firms in Finland are listed in the public register. The names and addresses of all the KHT and HTM auditors could be found on webpages of the Finnish Auditing Board.

![Figure 22. Number of authorised auditors in Finland, January 2013 (Finnish Auditing Board 2013b)](image)

Figure 22 presents a number of authorised auditors in Finland as of January 2013. Interestingly, 70 percent of certified auditors are male and the rest 30 percent are female. Roughly half of HTM and KHT auditors are aged over 50. (Finnish Auditing Board 2013b.)
Figure 23 presents a summary of auditors in Finland in a hierarchical structure. The word “auditor” refers to both a physical person and a firm.

![Hierarchy of auditors in Finland](image)

**Figure 23. Hierarchy of auditors in Finland**

### 6.4 Auditing solution for the case company

As previously stated, the current auditing expenditure of the case company equals to 3000 euros per audited financial year. As the results of the research revealed, the costs derive from the two main factors:

- the number of hours spent on an audit
- the qualification of an auditor

In other words, there is an obvious cause and effect relationship behind the auditing costs of the case company. Auditing costs are made up of the number of hours spent by the auditor multiplied with the hourly rate that the auditor charges for his/her work. This relationship can be expressed as an equation:

\[
\text{Auditing costs} = N \text{ hours} \times \text{hourly rate (EUR)}
\]

Mathematically, there are two variables influencing the auditing cost and change in either of them will have an impact on the final result. In practice these variables are affected as follows:
Auditing costs = N hours * hourly rate (EUR)

When the number of working hours is concerned, inconsistencies in accounting records of the case company increase the amount of hours that an auditor requires to complete the work. As for the hourly rate, the union currently has an agreement with a certified HTM-auditor. This means that based on his qualification, the auditor charges higher hourly rate for auditing financial statements than, for example, an auditing assistant would charge.

Traditionally, the size of the company varies in the direct proportion to the auditing costs. Meaning that bigger corporations are likely to spend more money on auditing than smaller companies do. However, the student union X is a relatively small organisation and auditing costs should not be so overwhelming.

As opposed to the accounting issue, the auditing solution proved to be straightforward. In order to maximize savings on auditing, two issues have to be addresses simultaneously:

- Accounting records have to be comprehensive.
- Union’s auditing should be passed to a less certified auditor.

Keeping proper accounting records refers to bringing into practice the improvement recommendations presented earlier in Chapter 3. Changing the existing auditor to a less certified one does not imply that the quality of auditing will be put into question. The certified KHT- and HTM- auditors and auditing firms are mainly providing services to organisations whose financial documents are more complex and demand
deeper knowledge to be audited, compared to those of the commissioning party. So using the services of auditors, who do not hold a KHT or HTM qualification will not undermine the quality of audit in any way. If the case company manages to comply with the two above listed conditions, it will be able to decrease its auditing expenses dramatically and bring the costs to the target level.

The case of transition
There could be different reasons why companies are reluctant to switch to a different auditor or an auditing firm. Some companies are obliged by law to do that after a certain amount of years, others might not be fully satisfied with the existing auditor or a firm. For bigger organisations, changing an auditor could be a complicated and a time-consuming process, as a new auditor has to get familiar with the company’s business and its specific features. Though this is not quite applicable to the case company. Concerning the relative simplicity of their business, the transition to a new auditor should not be problematic.
7 Results and key findings

Before proceeding with presenting the results and key findings of the project, below is a short summary of a background for the project and the purpose of this thesis.

A case company, which is a student union X, commissioned this work in order to help them resolve the accounting and the auditing problems. The core objective was to decrease current accounting and auditing expenses to target levels: by 50 and 80 percent respectively. The time allocated for the completion of this project was 4 months, from February 2013 to May 2013.

Based on the information collected from observations, interviews and theoretical study, a set of scenarios for addressing the company’s accounting problem was created (the final product). Each scenario was then analysed in detail to evaluate its financial viability and suitability for the student union X. The commissioning party has selected the insourcing accounting option as the most attractive scenario. That is why this alternative was investigated more profoundly than the others, bringing the classification of accounting software as the outcome of the project. During the discussion meeting with the contact person, a list of software choices was narrowed down to the most appropriate options. These in turn were investigated in detail and the final selection was made by the case company during the annual stakeholder meeting.

When it comes to the auditing problem, the selection of alternatives was quite limited if compared to the accounting scenarios. This happened mostly due to the fact that the solution was explicit and based on improving the company’s accounting process.

A detailed summary of proposed scenarios can be found in Attachment 4.

7.1 Project evaluation

In the closing part of the thesis, the author recognises the importance of comparing the outcomes of the project with the target objectives. The project objective defined in the introductory part of this work was expressed as follows:
Finding solutions to decrease case company’s current accounting costs by 50 percent and auditing costs by 80 percent.

The project objective was reached by implementing the project tasks listed below. More information on how the project results meet the budgeted cost reduction is presented further in this chapter.

PT1. Exploring the accounting process and its costs for the case company
The concept of accounting process has been studied from various theoretical perspectives. A detailed description of the current accounting process in the case company is presented in Chapter 3, based on interviews with the contact person and observations. A thorough cost analysis has been performed in order to trace the origin of the accounting expenses. Average monthly and yearly expenses of the commissioning party are introduced and a plan for decreasing them is presented.

PT2. Creating a set of scenarios for decreasing accounting costs of the student union X
A set of scenarios for decreasing accounting costs has been created. For that purpose, a market research of accounting software and service providers has been conducted. The solutions involving insourcing and outsourcing of accounting services are presented and discussed in every detail. The alternatives are finally presented for the case company for evaluation and selection.

PT3. Discovering the option selected by the case company in more detail
The option selected by the case company - insourcing accounting has been explored in detail. Preconditions for doing accounting in-house are established. Benefits and challenges have been thoroughly discussed. The most suitable alternatives of accounting software and their costs have been presented for the commissioning party.
PT4. Reducing auditing costs
Auditing and its functions have been studied from a theoretical perspective. A need to conduct an audit in the case company is established. Cost drivers of the auditing expenses have been identified and the solutions to reduce auditing expenses presented to the commissioning party.

7.2 Product assessment
As it was originally planned, a tool for reaching the project objective was created. This section of the thesis aims at evaluating the final product – a set of scenarios, and presenting reasons influencing case company’s decision to reject or approve each proposal.

For addressing the accounting problem two completely opposite paths were presented for the case company. Namely, to bring accounting in-house or continue outsourcing the accounting service.

Outsourcing accounting
The accounting service provider has been performing accounting services for the student union X for the past few years. So one of the options will be to leave it that way. However, costs have to be considered at the first place. Here the path for the case company diverges in two directions again. One possibility is to continue using the services of the current service provider and the other is to switch to a different company.

Current service provider
If the student unions decided to stick to the existing service provider, an absolute requirement to reduce costs would be to improve their accounting process. Recollecting the image from Chapter 3, the accounting process consists of several serial steps. However, only the initial stage which involves detecting economic transactions and collecting documentation is currently performed by the union members themselves. This means that case company’s actions at this phase can considerably enhance the flow of the entire accounting process. So from the union’s side, developing the ac-
counting process would only require gathering supporting documentation of economic transactions and delivering it according to the contract terms to the accountant.

This change to the existing pattern alone could save about 25 percent on monthly accounting expenses. This is estimated based on the fact that extra hours of an accountant make up around 25 percent of the average monthly bill. However, according to the budgeted plan, the target level of savings was set at 50 percent. This indicates that something more has to be done to achieve the goal. A VAT registration possibility appeared as a potential solution. As mentioned before, the student union X is not a VAT registered entity. Practically this means that VAT, which the service provider is adding on the bill is a direct expense for the case company, which it can possibly claim back. The recent VAT rate on accounting services is set at 24 percent. Had the union been registered for VAT, it would have gotten a refund equalling the tax rate.

If combined, the improved accounting process and the VAT registration would save the case company about 40 percent of accounting expenses. Although the target level of savings will still not be reached, this option in Secretary General’s evaluation was rated “quite good”.

Despite being an attractive scenario for the student union, the Secretary General rejected the proposal to become VAT registered. The reason behind is that VAT registration has a dual effect on the union’s operations. The advantage of claiming VAT back has already been discussed. As for the disadvantages, the same tax percentage would have to be added on the union’s sales. This was the determining argument for the Secretary General to reject the proposal.

There might be some other potential ways to decrease the accounting costs under this scenario. These options have not been covered by the thesis, but they could include such ideas as trying to negotiate a cheaper price with the current accounting service provider, making an emphasis on being a loyal customer for many years. At the moment, the accounting for the student union X is done on a monthly basis, so perhaps it
could be cheaper to do it on quarterly basis. In this situation, however, the management would lack updated information on the union’s financial position.

**New service provider**

For the purpose of introducing another scenario, the author suggests to return back to the crossroads of staying with the current service provider and switching to a new one. So had the student union decided to outsource its accounting service to a different company, the situation could have looked the following way. For a start, the author recognises the importance of expanding the definition of a new service provider. In the context of this situation, the words new and cheaper would merely be synonyms. So by proposing a new service provider, the author means a less expensive one.

For some reason, the option of switching to a new service provider did not take the leading position from the very beginning. That is why only a perfunctory analysis of accounting companies on the Finnish market was conducted. Although not enough evidence was collected to claim that the prices charged by the existing service provider are upper-market prices or above average, but the initial findings indicate that companies offering cheaper services are available. Again, less expensive service prices do not yet signify decline in quality.

Should the union decide in favour of outsourcing accounting services to a less costly provider, it could reduce about 20 percent of its accounting costs. One should not forget, that in order to take the most advantage of this scenario, the proposed improvements to the accounting process should also be realized.

The combined effect of improved accounting process and cheaper accounting services are hard to evaluate precisely. This is explained by the matter that the price-setting techniques employed by different accounting firms may vary. This makes it inapplicable to estimate how improvements in accounting process of the case company will impact the price of a new service provider and what the savings would be compared to the current accounting costs.
The author would personally evaluate this scenario as having unexplored potential and being possibly a good way to cut 50 percent of the accounting expenses. As the direction of this project was strongly influenced by the preferences of the case company, the author suggests deeper investigation of that scenario for the following researchers.

7.3 Discussion of the selected option

Insourcing accounting

Now the author suggests going two steps back, where a decision between outsourcing and insourcing of accounting is to be made. So far undiscussed option of insourcing accounting deserves special attention. Primarily because this is the path chosen by the commissioning party. This scenario introduces a dramatically different approach to solving the union’s problem. It suggests to give up using accounting firm’s services in favour of doing accounting inside the union. This option is further split into two alternatives: hiring an accountant or using the existing employees to perform accounting in-house.

Even though a part-time account would be enough to perform all the accounting functions of the union, hiring an extra employee would have become a financial burden for the case company. This is due to the fact that besides the accountant’s salary, the student union would also incur a number of other employee-related costs: social costs, insurances, etc. That is why the case company decided to manage with the existing personnel resources.

In order to save on hiring an extra employee, the Secretary General intended to function as an accountant. This became possible for two reasons: the Finnish law does not regulate that a person doing accounting has to have any special education and the General Secretary had the needed capacity and ability to do it. The thesis author provided him with the useful links to Taloushallintoliitto and Verohallinto, where all the most essential information needed to perform accounting could be obtained. Attachment 7 presents an extract from Taloushallintoliitto (2013), which summarises the most important deadlines for the Finnish companies in 2013.
When it comes to the actual software, the selection was made in favour of a digital accounting software. The agreed price for the software was 320 euros per month, including VAT. On a yearly basis this would roughly make 3850 euros. Expressed as a percentage, this option is supposed to be 60 percent less expensive than the current alternative.

<table>
<thead>
<tr>
<th>Total Accounting Costs</th>
<th>Software costs (direct)</th>
<th>Working hours (indirect)</th>
<th>Other possible indirect costs</th>
</tr>
</thead>
</table>

Figure 24. Total Accounting costs

An important notice to make is that it would be erroneous to only consider the cost of the software as the total cost of this scenario. Figure 24 presents a formula for calculating the total accounting costs for the case company. In Management accounting, the costs are classified into direct and indirect. The direct costs can be attributed to a specific cost object. In the case with student union’s accounting, the monthly fee for the software is a direct cost which is traced to the accounting. However, it is also important to account for the indirect costs, which cannot be identified specifically and exclusively with a given cost object. (Drury 2005, 30-31.)

In case with the commissioning party, the indirect costs would be working hours spent by the Secretary General on doing accounting. A portion of his salary, calculated based on the working hours he spent on accounting, should be added to the total costs. This portion of expenses is challenging to estimate at this point, because the software has been implemented just recently. That is why initial efforts and time spent to learn the new system are inevitable. The number of hours that the General Secretary spends on accounting monthly could be more precisely determined when the software has been operational and smoothly running for some time.

The author’s suggestion would be to calculate the total accounting costs (both direct and indirect) for an entire financial year when accounting is done in-house. It is also crucial to consider the hidden costs, or costs that emerged after the decision was made.
and were not taken into attention. These include possible consultancy fees, training expenses, etc.

The author sees the importance of assessing the benefits of a chosen scenario in a year from now. The case company is still under the transition period. So it is too early to make any conclusions on the successfulness of bringing accounting in-house from the financial perspective. Improvements of the accounting process would also be applicable and even more useful in this scenario, because from now on the union is solely responsible for the entire process.

**Auditing**

A solution to the auditing problem was not a pure scenario, but rather a straightforward path. Two primary cost-drivers were identified: the number of hours spent by an auditor on doing the audit and the hourly charge. Consequently, solving the accounting issue and keeping proper accounting records would mean that auditing costs would be decreased as well. The other key element is choosing a cheaper auditing service provider, considering that there is no obvious reason to use services of an expensive certified auditor.

**Summary**

It is distinctly visible in Attachment 4, presenting the summary of scenarios, that an unconditional requirement for successful implementation of each scenario, inclusive auditing, is improving the accounting process. A path to be chosen is mostly a question of preference, but the underlying success factor lies in the accounting process.

Summing up, the root of both the accounting and the auditing problems was in deficiencies of the union’s accounting process. The author strongly believes that addressing this issue as the core problem should be the primary focus of the case company.

Overall, a comprehensive set of alternatives was provided for the case company as a final product. The scenarios encompassed a wide range of alternatives. Prerequisites for implementing each of the options in company’s operations are discussed. The cost-
cutting potential of each scenario was estimated in order to provide a more exhaustive representation of each alternative’s financial viability.

7.4 Benefits for the commissioning party and the field

“…Everything happens for a reason.” (Anonymous.)

Someone once put it very accurately, there is always a purpose behind everything. Therefore the author feels like discussing the impact, the footprint that this thesis has left for the case company and her study field.

Commissioning party

For the purpose of evaluating the benefits of this thesis for the commissioning party, the author contacted the Secretary General to arrange an interview. As it typically happens in the business world, the contact person in the company has been replaced by a new Secretary General. So the person who actually commissioned this thesis and was working in close cooperation with the thesis author during Spring 2013, was no longer employed by the union in Fall 2013, when the final interview took place. The new Secretary General started his duties in the union in October 2013, so by the time of the meeting on 13th November 2013, he has only been working there for a few weeks. Although he is a new employee and might not be fully informed about this thesis and all past accounting problems, the author decided that it is important to interview him and present his reflection on the current situation in the company.

During the interview, the Secretary General revealed that he has academic background in Business Administration, with a core focus on management studies. He also has prior experience in working for other student unions, but he has never done accounting himself. So the interviewee shared his experience in working with the selected software and told that it was very handy and easy to learn. He referred to it as “a decent tool to use”. (Secretary General. 13 Nov 2013.) It is important to highlight, the software option proposed by the thesis author was not only selected, but also purchased, implemented and now it is successfully running.
As for the financial estimations for the current year, accounting costs are expected to stay within the 6,000 euro limit, which does not fully meet the 5,000 euro objective. It should be noted that the software has only been implemented since June, so for the first five months of 2013 the accounting service has been outsourced. This has had a significant impact on the total annual accounting expenses. So the thesis author and the Secretary General shared an opinion that there is a good reason to believe that in the following financial year the costs will not exceed the 5,000 euro target limit. When it comes to the auditing costs, the union expects that they would considerably go down as well, because now all the information for the auditors is stored in the accounting software. The final auditing expenditure is yet hard to evaluate before the financial year is over.

The Secretary General concluded that most of the accounting and auditing issues that the union has been going through in the past, have now been corrected. He also added that the union was fully satisfied with the solutions provided by the thesis author. It was agreed that there is room for further cooperation and the union is willing to become a case company for other thesis topics.

The Secretary General admitted that the problematic areas still exist: the union does not really know how much money it is getting and from which sources. This is the first year in the union’s history when they are trying to make use of the revenue recognition concept and allocate membership fees to the related semesters. However they are still missing a proper budgeting tool. So this could serve as a topic for other thesis projects.

The field
While the benefits for the case company are quite obvious as they are expressed by the direct beneficiary and commissioner of this project, the value for the whole accounting field is more difficult to evaluate. The nature of this thesis is a case study project, which has been spurred by the problems of one specific student union in Finland. Although the findings cannot be directly applied to other companies, there is room for some generalizations of the outcomes.
According to the thesis author, the most valuable part of the project is the product itself - a set of scenarios for decreasing accounting costs of the case company, which mainly discusses two primary alternatives: insourcing and outsourcing accounting services. The author suggests, that these options serve as a threshold for companies willing to reduce accounting expenses. With some corrections, these scenarios could be applied to solve problems in other organizations. The principles of proper accounting process are universal, regardless of the size of the business and its field of operation. So these principles could be used as a checklist to detect improvement areas at the earliest stages, when first concerns about accuracy of company’s accounting arise.

Another valuable finding is the classification of accounting software. That could be especially beneficial for companies trying to insource accounting and start-ups, which usually lack information on the accounting software and its suitability for different kinds of businesses. A list of questions to be considered before choosing a software as well as the list of cost drives presented in this thesis will most probably be helpful in making the right decision.

A special characteristic of this thesis is that it promotes an innovative approach to doing accounting - the digital accounting solutions. The costs and benefits of e-accounting are discussed in balance and latest trends and developments are introduced. It is author’s strong belief, that an innovative approach to solving accounting problems brings new perspectives on the entire business of the company and could also help to improve other functions.

The thesis presents a comprehensive view on auditing and its function on an international level as well as it specifically discusses auditing in Finland. The auditing profession in Finland is described and a hierarchy of auditors is produced. Main factors affecting the auditing costs of a company are introduced. The thesis author strongly believes, that this information could be utilized by other companies in Finland who are seeking to decrease their auditing costs.
8 Conclusions

The ultimate chapter of this thesis addresses the international dimension of this work, presents limitations of the project, evaluates reliability and validity of the research component, offers suggestions for further projects and discusses author’s own learning.

8.1 International aspect

The international aspect section aims at presenting what kinds of generalizations could be made from the project findings, while pointing out the local peculiarities. The goal of this subchapter is also to show the interdependence of Finnish accounting, auditing and taxation regulations with the international standards.

Accounting on IFRS, GAAP and FAS levels

As defined by Choi and Meek (2011, 51) accounting standards are regulations that guide the preparation of financial statements. Throughout this thesis the author is mostly using accounting books that present an IFRS viewpoint. Abbreviation IFRS stands for International Financial Reporting Standards, which is now being used or at least permitted by most countries around the world (Harrison et al 2011, 7). It should be noted however that accounting laws vary in different jurisdictions. Troberg (2013, 13) specifies four factors that contributed to the differences in national accounting systems: providers of finance, tax system, role of accountancy profession and legal system. Many countries like US, Japan, China, Russia, etc. still adhere to local Generally Accepted Accounting Principles (GAAP). This has created major challenges for doing business globally.

Troberg (2013, 12-13) along with Choi and Meek (2011, 250-253) recognise the necessity of harmonisation of accounting standards to better address the needs of company interest groups (international investors, lenders, etc) by making financial statements comparable.
The local accounting rules which Finnish companies follow are known as Finnish Accounting Standards (FAS). According to Tomperi (2011b, 7) IFRS as well as EU directives have had an impact on the FAS. Despite all the dissimilarities in the accounting standards, clear moves towards integrations have already been taken. For example, by decision of the European Commission, all EU publicly listed companies will have to follow IFRS in their financial reporting starting from 2005 (Troberg 2013, 18).

Auditing
A precondition for efficient and well-functioning global economy according to Troberg (2013, 181-182) is comparability and transparency of financial reporting. The author continues that this requires not only unified accounting standards, but also an integrated international auditing system. The International Auditing and Assurance Standards Board (IAASB) is a body that sets high-quality auditing and assurance standards. By doing that it facilitates the convergence of global and local norms. (IAASB 2012.) On a local Finnish level, the Finnish Auditing Act (2007/459) prescribes that auditors have to follow the international standards on auditing (ISAs) in carrying out the audit.

The Finnish institute of Authorized Public Accountants is a member of IFAC, the International Federation of Accountants, which is working in cooperation with IAASB (KHT-yhdistys). The HTM-auditors’ association is a full member of IFAC and of NRF- the Nordic Federation of Auditors, which represents all audit professions in Denmark, Finland, Iceland, Norway and Sweden (HTM-auditors’ association 2012).

Taxation
Taxation system is unique in each country. This makes it challenging to make any generalizations on that issue. Taxation in Finland is similar to that of other Nordic countries in its level, which according to OECD Revenue Statistics is higher than the average in its member states (Finnish Ministry of Finance 2009, 15).

When VAT in particular is concerned, the system works similarly in all the EU countries under the regulation of the Taxation and Customs Union of the European Com-
mission (European Commission 2013). The VAT rates are the highest in Nordic countries. Nevertheless some significant discrepancies still exist. As presented in the earlier chapter, Finland has a standard VAT rate of 24 percent and also reduced rates on some products and services. However, for instance, Denmark has no reduced VAT rate and the standard rate is set at 25 percent. What the country does offer is a list of goods and services which are vat exempt. (KPMG 2013.)

Taxation systems are too complex to be compared or generalized. In the context of this thesis, a solution for the commissioning party to become VAT registered might not work in the same way in other countries due to differences in local TAX regulations.

8.2 Limitations of the project

The approach to the research part of this project was qualitative. Qualitative research is highly contextual as highlighted by Gray (2009, 166) and the fact that this is a case study poses evermore limitations on the results. Findings are targeted at solving specific problems of the commissioning party, however they might not be applicable in other settings. In other words, the solutions and outcomes cannot be generalized on all levels.

From a geographical perspective, the research is highly relevant for companies operating in Finland. The same solutions, however, might not work even in neighbouring Estonia, Russia and Sweden, due to the fact that legal differences are so strong. From a company viewpoint, the commissioning party is an uncommon example and is characterised by the following:

− It is a student organisation. As specified earlier, the main goal of a student union, unlike most of the companies, is not profit maximisation.
− The union receives funding from the University. It is not typical of most companies to get additional financing.
− The case company is not VAT registered. It is very common, that even small companies in Finland are registered for VAT, because it is quite beneficial: the VAT on
sales is not an expense of the company itself, but rather to the consumer of goods and services.

Concerning these specific features of the case company, the proposed solutions might not necessarily work in the same way for other organisations.

It is important to remember that this is a Bachelor’s thesis. Due to the restricted scope of the research, limited amount of resources and time constraints, the thesis author did not have a chance to explore all of the topics included in this work in every detail.

8.3 Reliability and validity of the research part of the project

As research was an important part of this project, the author finds it relevant to reflect on the reliability and validity of the thesis findings. Saunders et al (2009, 156) explain reliability as the extent to which data collection techniques or analysis procedure will yield consistent findings. In other words, reliability is mainly concerned with trustworthiness, accuracy and consistency of phenomenon in question. It can be assessed by answering the following three questions:

- Will the measures yield the same results on other occasions?
- Will similar observation reached by other observers?
- Is there transparency in how sense was made from the raw data?

So in order to prove that the outcomes of this project are reliable, the above set questions would be answered. The measures would most probably produce similar results under comparable circumstances. The situation of the case company was unique, so it strongly determined the research outcomes. Other observers are likely to get similar observations under one central condition: there is a financial rational behind their approach. Transparency is a subjective issue in essence. The author attempted to make decisions in such a way that the logic is clear for the reader. This is achieved by establishing strong cause-and-effect relationships between variables.
Other threats to reliability according to Saunders et al (2009, 156-166) are: subject or participant error, subject or participant bias, observer error, observer bias. The author is certain that there are no reasons to assume that there has been any kind of bias or errors from either of the parties. The participant error and bias were eliminated by arranging a series of face-to-face interviews which produced consistent results. The information revealed was kept strictly confidential, so there shouldn’t be any grounds to suspect that the respondent’s words were influenced by somebody else.

From the observer’s side, the author tried to keep neutrality when asking interview questions. The neutral approach was also taken when presenting scenarios for the case company. All advantages and disadvantages of each alternative were exhaustively discussed with the commissioning party and the final decision was left for them. So the author was not trying to force the case company into any specific decision.

Gray (2009, 517) brings out conversational analysis as one of the threats to reliability. He claims that taped conversations have a higher degree of reliability than handwritten notes. On the other hand, video and audio recording might lose important aspects of social interaction. It is author’s strong belief that the approach she has chosen has facilitated the research in best possible way and does not impose any threats to reliability of the findings.

Validity refers to whether a researcher is observing, identifying or measuring what they claim they are. Validity can be divided into external and internal. External evaluates the degree to which findings can be generalised to other social or organisational settings. In case with a qualitative research it is difficult to achieve, due to the tendency to use case studies and small samples. Internal validity identifies whether there is a clear link between evidence and the theoretical ideas that are developed from it. (Gray 2009, 515.)

So an important criterion in assessing validity is actually evaluating if the research answers its target objectives. The author assumes that the project does meet the set objectives, because according to the commissioning party feedback, the costs for accounting and auditing were decreased.
Saunders et al (2009, 150) state that testing the results is one means to increase validity. In the case with this thesis, testing scenarios would be an option to improve validity. However there was no practical opportunity to do that due to limited amount of time and resources. For this reason the alternatives proposed to the case company are evaluated hypothetically and their financial viability is assessed as accurately as possible.

There are a few words to say about quality and neutrality of literature that the author is using. The majority of sources used are relevant and up-to-date. Nevertheless books on digital accounting written in the early 2000s can fairly be considered outdated due to rapid changes and development of the industry. So the author made some modifications and corrections when presenting information from these sources.

Some sources that the author was using are written as advertisements by companies offering software and accounting services. So the described consumer benefits might be exaggerated. In order to deal with this issue the author takes a critical approach and carefully evaluates the credibility of this information.

8.4 Suggestions for further projects

The purpose of this section is to provide recommendations for further projects. The thesis author suggests:

− Conducting a more detailed analysis of software and accounting service providers in Finland.
− Creating a more generalized set of scenarios to be used by a wider audience.
− Exploring the indirect costs of doing accounting in-house.
− Creating a budgeting tool for the case company.

Based on the interview from 13 Nov 2013, the Secretary General would be interested in further cooperation with thesis writers. The following issue on the union’s agenda is improving the managerial control of the organisation’s accounting. The union is still facing some difficulties in estimating its revenues and expenses. So creating a budgeting tool would be one possible topic for the next project.
8.5 Personal learning

The thesis topic provided a perfect learning opportunity for the thesis author as a project manager, researcher and a future accounting specialist. In order to solve the real business problem of the commissioning party the author had to accumulate all theoretical knowledge from studies at HAAGA-HELIA and augment it with information collected throughout the project. Project management experience was a valuable skill acquired as an outcome of this thesis. The author also discovered such accounting and auditing topics and dimensions, which were previously unknown for her, for instance, hierarchy of auditors in Finland, digital accounting and others.

The author has mastered her language skills. The project was carried out using both English and Finnish, none of which is the author’s mother tongue. The author has exercised analytical judgement in finding relevant, reliable and updated information. Intrapersonal skills have also been improved during the thesis project. The author had to organise and conduct both face-to-face, telephone and online interviews in English and Finnish, so that helped her overcome shyness in communicating with people in different languages.

The author was particularly carried away by a book on of Troberg IFRS Now (2013). Even though the material in that book was not directly linked to the topic of this thesis, the author used it as a book for leisure time reading. It has incited some thoughts and ideas for further research perhaps during Master’s studies.

Overall, knowledge and experience gathered throughout the entire thesis process proved to be very relevant and practical. The thesis author is particularly satisfied with the fact that she was able to manage such a large-scale process on her own. In author’s opinion this thesis project could be considered successful: all the set deadlines were met and the desired outcomes achieved.
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PriceWaterhouseCoopers 2012. Audit and assurance. Revenue recognition. Accounting for revenue recognition: more critical than ever. URL:


Secretary General. 26 Feb 2013. Student union X. Interview. Helsinki.


Student union X’s rules 2011. Company’s intranet.


## Attachment 1. Project Gantt chart

**Project objective:** Decreasing accounting costs by 50% and auditing costs by 80%  

<table>
<thead>
<tr>
<th>Pre-Tasks</th>
<th>Project Tasks</th>
<th>Subtasks</th>
<th>Tools</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
<th>May 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting the case company and negotiating the topic</td>
<td>Initial meeting</td>
<td>6 Feb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining project objectives and tasks</td>
<td>Discussion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1. Exploring the accounting process and its costs
- 1.1 Theoretical study of an accounting process: Theoretical research
- 1.2 Discovering legal aspects of doing accounting: Finish legislation
- 1.3 Describing current accounting process in union: Empirical research

### 2. Creating scenarios to decrease accounting costs
- 2.1 Comparing theory and empirical data: Theory and research data
- 2.2 Designing scenarios for the case company: Brainstorming, discussions, theory
- 2.3 Selection of the scenario: Done by the case company

### 3. Studying the selected option in more detail
- 3.1 Exploring possibilities and prerequisites: Theoretical research
- 3.2 Evaluating financial viability: Interviews, internet research

### 4. Finding ways to reduce auditing costs
- 4.1 Exploring auditing and requirements for the union: Theoretical research
- 4.2 Identifying cost drivers: Theoretical, empirical research
- 4.3 Designing a solution: Brainstorming and discussion

The case company decides on the scenario.

An accounting solution has to be presented to the stakeholders.

Auditing solution has

The table includes dates and notes for each task.
Attachment 2. List of interviews

<table>
<thead>
<tr>
<th>№</th>
<th>Participant/interviewee</th>
<th>Comments</th>
<th>Interview form</th>
<th>Date, place and duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Secretary General</td>
<td>Initial interview, where the thesis topic emerged</td>
<td>Face-to-face</td>
<td>6 Feb 2013 Helsinki 45 minutes</td>
</tr>
<tr>
<td>2</td>
<td>Secretary General</td>
<td>Discussing the current accounting process and challenges</td>
<td>Face-to-face</td>
<td>26 Feb 2013 Helsinki 60 minutes</td>
</tr>
<tr>
<td>3</td>
<td>Secretary General</td>
<td>Discussing the potential cost-cutting scenarios</td>
<td>Face-to-face</td>
<td>12 Mar 2013 Helsinki 60 minutes</td>
</tr>
<tr>
<td>4</td>
<td>Secretary General</td>
<td>Receiving invoices and agreement with the accounting service provider</td>
<td>E-mail message</td>
<td>20 Mar 2013</td>
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<tr>
<td>5</td>
<td>Secretary General</td>
<td>Discussing options of software</td>
<td>Face-to-face</td>
<td>30 Apr 2013 Helsinki 45 minutes</td>
</tr>
<tr>
<td>6</td>
<td>Secretary General</td>
<td>Information about auditing costs</td>
<td>E-mail message</td>
<td>7 May 2013</td>
</tr>
<tr>
<td>7</td>
<td>Secretary General</td>
<td>Discussing auditing solution</td>
<td>Face-to-face</td>
<td>29 May 2013 Helsinki 45 minutes</td>
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<tr>
<td>8</td>
<td>Secretary General</td>
<td>Discussing improvements in accounting and auditing</td>
<td>Face-to-face</td>
<td>13 Nov 2013 Helsinki 30 minutes</td>
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<td>9</td>
<td>Sales representative 1</td>
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<td>Activity Description</td>
<td>Communication Method</td>
<td>Date</td>
</tr>
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<td>---</td>
<td>---------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>10</td>
<td>Sales representative 1</td>
<td>Finding out prices and functionalities of a software, receiving an offer</td>
<td>E-mail message</td>
<td>25 Apr 2013</td>
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<td>Sales representative 2</td>
<td>Finding out a price of a payroll system</td>
<td>E-mail message</td>
<td>26 Apr 2013</td>
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<td>Discussing software options and receiving an offer</td>
<td>Phone call</td>
<td>27 Apr 2013 15 minutes</td>
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Periodic tax return form

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<th>Employers’ Contributions</th>
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**Reporting frequency**

- Monthly
- Quarterly
- Yearly

**Period in question**

- 653 Year

**Tax on domestic sales by tax rate**

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<th>Item</th>
<th>Percentage</th>
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<th>Cent</th>
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<td>501</td>
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<tr>
<td>502</td>
<td>14%</td>
<td></td>
<td></td>
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<tr>
<td>503</td>
<td>10%</td>
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**Tax on goods purchased from other EU Member States**

<table>
<thead>
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<th>Euro</th>
<th>Cent</th>
</tr>
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<tbody>
<tr>
<td>505</td>
<td></td>
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**Tax on services purchased from other EU Member States**

<table>
<thead>
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<th>Item</th>
<th>Euro</th>
<th>Cent</th>
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</thead>
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<tr>
<td>506</td>
<td></td>
<td></td>
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</table>

**Tax on construction services**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
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<tr>
<td>(reverse charge)</td>
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**Tax deductible for period in question**

<table>
<thead>
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<th>Euro</th>
<th>Cent</th>
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</thead>
<tbody>
<tr>
<td>507</td>
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<td></td>
</tr>
</tbody>
</table>

**K**

**Amount of VAT relief**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>517</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tax payable / Negative tax that qualifies for refund**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>508</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sales taxable at zero VAT rate**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>509</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sales of goods to other EU Member States**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>511</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sales of services to other EU Member States**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>512</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Purchases of goods from other EU Member States**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>513</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Purchases of services from other EU Member States**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>514</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sales of construction services (reverse charge)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>519</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Purchases of construction services (reverse charge)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>520</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No VAT activity**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>504 Period-end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>505 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>506 Period-end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>507 Year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For taxpayers within VAT relief scheme

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>312</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sales that qualify for VAT relief**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>313</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tax that qualifies for VAT relief**

<table>
<thead>
<tr>
<th>Item</th>
<th>Euro</th>
<th>Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>316</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Send completed form to:
FINNISH TAX ADMINISTRATION
PO Box 3000
00653 VERO

PERIODIC TAX RETURN (page 2)
If making corrections to an earlier filing, please only submit difference amounts instead of full amounts. Do not send any enclosures with the Periodic tax return form.

<table>
<thead>
<tr>
<th>Taxpayer’s name</th>
<th>O10 Business ID or personal identity number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TAX RETURN FOR OTHER UN-PROMPTED TAXES

Please enter type of tax (code numbers from list below), reporting frequency, taxable period in question, year, and amount of tax payable.

10 Lottery tax
16 Tax on insurance premiums
24 Amount withheld from purchase price for timber
25 Amount withheld from payment to limited company, cooperative or other corporation
68 Amount withheld from interest paid out
92 Amount withheld from dividend paid out
39 Tax at source withheld from dividend (paid out to nonresidents)
69 Tax at source withheld from interest and royalties (paid out to nonresidents)
84 Tax at source withheld from interest income (of residents)

<table>
<thead>
<tr>
<th>060 Tax type code</th>
<th>065 Reporting frequency</th>
<th>061 Period in question</th>
<th>053 Year</th>
<th>061 Amount of tax payable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For taxpayers of tax on insurance premiums (vakuutusmaksuvero):

<table>
<thead>
<tr>
<th>No-activity period of business subject to insurance-premium tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>054 Period-end</td>
</tr>
<tr>
<td>----------------</td>
</tr>
</tbody>
</table>

Date
Signature and printed name
042 Telephone

VEROSKATT

To enable machine-reading and optical character recognition, please only use original Form 4001 (no photocopy, no fit-to-size printout).
Attachment 4. Cost-cutting scenarios for the case company
Attachment 5. Accounting software classification

Home/Small Business

Basic accounting functions:
- transactions entries
- sales invoices
- purchase invoices
- basic reporting

Advanced modules:
- inventory and warehouse
- project management
- digital solutions
- customer relationship management

Enterprise-wide modules:
- supply chain management
- production planning
- finance
- HR
- etc

Small Business/Medium size Business

Characteristics:
- limited users
- restricted transactions
- limited invoice amount
- built-in database
- very cheap or free

Small Business

Free software (Dooranet, TiliTin, Tappio, Holli)
Very cheap (e-conomic)

Large Business Multinational Corporation

Characteristics:
- multiple users
- unlimited transactions
- higher or unlimited number of invoices
- expensive

Oracle ERP, SAP ERP, SAGE ERP, Microsoft Dynamics ERP

NetBaron Netvisor ProCountor (Visma) EmCE
Attachment 6. Software options selected for the case company

<table>
<thead>
<tr>
<th></th>
<th>License payments, euros (paid once)</th>
<th>euros/month (VAT incl)</th>
<th>euros/year (VAT incl)</th>
<th>Total costs euros/year (VAT incl)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td>Basic accounting (up to 4000 transactions/year)</td>
<td>26,04</td>
<td>312,48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payroll system</td>
<td>250</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td><strong>Complete package</strong></td>
<td></td>
<td></td>
<td></td>
<td>774</td>
</tr>
<tr>
<td><strong>Option 2</strong></td>
<td>Basic accounting, unlimited transactions</td>
<td>390</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payroll system</td>
<td>650</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maintenance contract (optional)</td>
<td></td>
<td>170</td>
<td></td>
</tr>
<tr>
<td><strong>Complete package</strong></td>
<td></td>
<td></td>
<td></td>
<td>1210</td>
</tr>
<tr>
<td><strong>Option 3</strong></td>
<td>Basic accounting and payroll</td>
<td>341</td>
<td>4092</td>
<td></td>
</tr>
<tr>
<td><strong>Complete package</strong></td>
<td></td>
<td></td>
<td></td>
<td>4092</td>
</tr>
<tr>
<td><strong>Option 4</strong></td>
<td>Basic accounting and payroll</td>
<td>322,4</td>
<td>3868,8</td>
<td></td>
</tr>
<tr>
<td><strong>Complete package</strong></td>
<td></td>
<td></td>
<td></td>
<td>3869</td>
</tr>
</tbody>
</table>
YRITYKSEN MUISTILISTA 2013

Tärkeät päivityt

Linnakan täydennysmaksu
ilmannäköisen korkeaa
ja yhteisöllä veroilmotuksen
virtaiseen antopäivänä ilman yhteiskorkeaa
Palkkauslippu tapaturmavakuutusyhtehdolle

31.1.
Työnantajan vuosi-ilmoitus
Veronmaksu (stkhieden)

31.1. (2)
Työeläkeyhtehdolle

31.1.
Osinkojen vuosi-ilmoitus (stkhieden)

31.1. (2)
Vuosi-ilmoitus pääomatukon verettävissä
osakkeina

24.2.
Verotuksen vuosimittely, ilmoitus- ja maksupäivä

28.2.
Veroilmotuksen
Maatalouden harjoittajat ja metsätalousen lomake 2C

28.2.
Verotusyhtiöt

28.2.
Liikkeen ja ammenihajoittajat

2.4
Elinkeinohyvyys (Asi Turku)

2.4
Osakeyhdistei ja muut yhteiset tilikaudat päättyivät

31.12.**
Vähintä toimintaa harjoittavat

7-14.5.
Annetunlukon veransijaalivakuutuslakie

vuodelta 2012

30.9.
Toistuvat päivityt

7. päivity

Papereita kurovieroilmotuksen

(prototyp Veronmaksu)**

Sähköiset kauviveroilmoitukset

12. päivity

Verolilvelojen maksupäivä

12. päivity

Yhteisveroilmoitus muiden EU-maidin

20. päivity

Ennakkojärjestelyjen

23. päivity

(kontaktokustukset ennakkojärjestelyissä)

Tilinpäätös ja toimintakerroinnin

2012

Rovaniemen kunnan tilikauden päättymisestä

Yrityksen sosiaalivakuutusmaksut

Työstäjän eläkevakuutus

55,59 e/kk

Sopimusrymäntä

23,4

Vuoden 2011 palkeusmäärä

- alle 1,6795 milj. €

- 1,6795 milj. € - 30,072 milj. €

- yli 30,072 milj. €

Lopulliseen määrään vaikuttavat asiakashyvitys yms. maksut

Yritysaloittonäytte

23,8

Yritysnäyttely

- alle 35 v

- 35 v täyttö

- 35 v täyttö

- 35 v täyttö

- 35 v täyttö

- gyytymysvakuutus

- pakko 1 000 000 e

- pakko 1 000 000 e, yrittävät osalta

- TyEl-vakuutuksent yrityksen osaaminen

- Tapaturmavakuutus


- Aloitteen työn tapaturman mukaisin

- köyhien

- Ryhmäpalkinnovakuutus

- Työnantajan saksanvakuutus

Palkansaajan sosiaalivakuutusmaksut

Sairausvakuutusmaksut

2,04

(palkaranhamaksu 0,74% ja sairaanhoitosmaksu 1,30%)

Yritysjärjestely

2,18

(palkaranhamaksu 0,74% ja sairaanhoitosmaksu 1,30%,

listaltausoosuus 0,14%)

Työttömyysvakuutus

- työntekijän maksut

0,6

- TyEl-vakuutuksent yrityksen osaaminen

0,2

Työeläkevakuutus

- alle 35 v työnantaj

5,15

- 5-35 v täyttö

6,50

Palkatun tahoaa taloushallintoliiton jäsen

Taloushallintoliitto
### Korot

- Puhelinotto: 0,75 €
- Yhteydenvastasyönrajoitus (vahvimmassa lehdennäppen monessa) 0,05 €
- Veropäivitys: 0,01 €
- Maksutettava yhteyskortto: 0,03 €
- Palautettava yhteyskortto: 0,05 €
- Liehinsuoja: 0,0 €
- Takuu: 0,05 €
- Vero: 0,05 €
- Vero: 0,05 €

### Matkakustannusten korvaukset

- Käyttöauto: 0,45 €/km
- Käyttöauto: 0,15 €/km
- Maa- ja itseveden käyttö: 0,05 €/km
- Kilometrikorvaukset: 0,05 €/km
- Kilometrikorvaukset: 0,05 €/km

### Luontolaitureiden verotusarvoja

- Auton käyttö (2011-2013): 0,16 €/km
- Auton käyttö (2013-2016): 0,18 €/km
- Auton käyttö (2016-2019): 0,20 €/km
- Auton käyttö (2019-2021): 0,20 €/km

### Arvonlisäverot

- Pääkyltti: 24 %
- Lääketulo: 14 %
- Liikennepalkit: 10 %
- Lääketulo, liikentepalkit, kulttuur- ja viihdepalkit, henkilökulutukset, moottoripyörät, tekijänoikeudet, kaikilla tarpeena olevat vero
- Lähetystulo: 24 %

---

Koko lista on valmistettu osana www.renku.fi

Pyydä tarkkuutuus muun palavarahanteet tilitillimmesto.

---

- Kiinassa: 63 €
- Spanissa: 55 €
- Yhdysvalloissa: 55 €
- Prancusissa: 66 €
- Austrias: 66 €
- Viro: 64 €
- Islannissa: 63 €
- Monako: 61 €
- Norja: 71 €