



UNIVERSITY OF  
NORDLAND

BODØ GRADUATE SCHOOL OF BUSINESS

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# MASTER THESIS

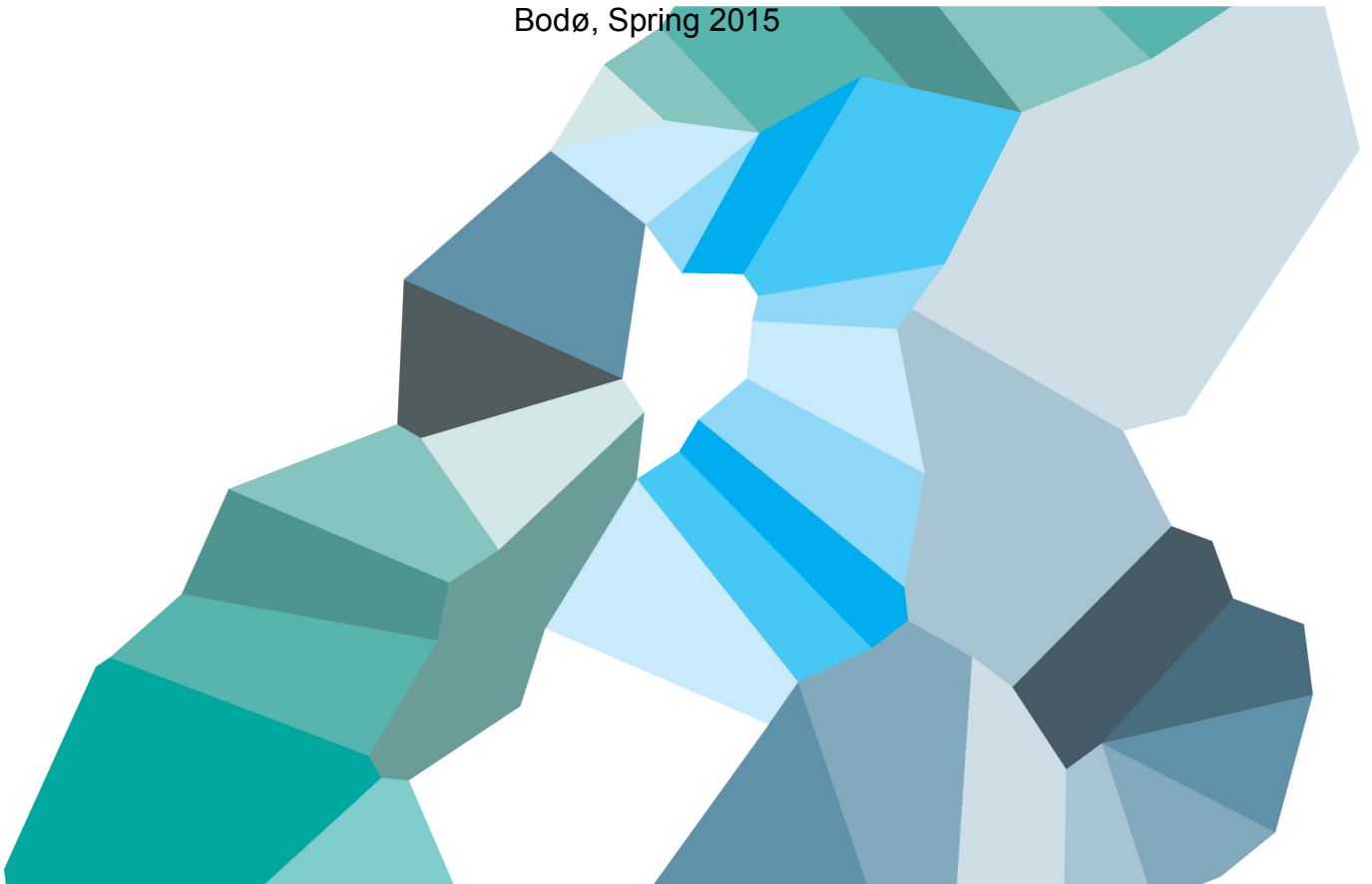
## **Various Shades of Accounting**

The roles of accounting in inter-organizational  
relationships

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BE330E Management Control

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### Sammendrag

Forskning av funksjonene til regnskap i et inter-organisatorisk setting er av økende interesse innen økonomistyring. Spesielt forskning av nettverk, som består av flere dyadic relasjoner mellom ulike aktører og enheter, er neppe undersøkt og det er antydning at forskningen startet bare i 2004. Men mange av organisasjonene som er organisert i et slikt nettverk står overfor en turbulent miljø som de trenger for å være raske nok til å reagere på endringer til enhver tid. Siden det er foreslått at ikke alle selskap har tilstrekkelige ressurser og kunnskap til å gjøre hver oppgave i seg selv, er rollen til outsourcing iboende som det gir selskapene mulighet til å outsource aktiviteter som noen andre kan gjøre raskere, billigere og bedre.

Litteratur på området bruk av regnskap i inter-organisatoriske relasjoner (Caglio & Ditillo, 2012) tyder på at regnskap har tre spesifikke funksjoner, nemlig en integrerende rolle, en informativ rolle og en beslutnings rolle. Men det er mange forskjellige typer av inter-organisatoriske relasjoner og derfor oppstår det spørsmål, hvorvidt disse funksjonene er iboende i hver type av disse forbindelser, eller hvis bruken av regnskaps varierer med typen av forholdet. Dermed er målet med studien å øke kunnskapen om bruken av regnskapsopplysninger i inter-organisatoriske relasjoner gjennom en analyse av den spesifikke konteksten av et multinasjonalt offshore outsourcing-leverandør i IT-bransjen.

Ved hjelp av en case-studie tilnærming som er støttet av en strukturert litteraturgjennomgang er det funnet at det foreslåtte rammeverket er generelt gjeldende, men forfatterne konkluderer med at de foreslåtte rollene er for bred til å forklare hvilke funksjoner regnskap har i inter-organisatoriske forhold. Det ble funnet at hver av de tre rollene innebærer mange andre roller som må nevnes for å forklare hvilken rolle regnskap har i inter-organisatoriske relasjoner. Forfatterne fant for eksempel at den foreslåtte integrerende rolle i forbindelse med kundene medfører åtte forskjellige funksjoner som tjener for eksempel til å løse konflikter og hjelpe ledere til å kommunisere ved bruk av et felles språk. Det faktum at den foreslåtte rammeverket omfatter mange ulike funksjoner ble også funnet i inter-organisatoriske forhold innenfor de organisatoriske grensene for nettverket av den analyserte selskapet Miratech.

**Nøkkelord:** Regnskap Information, Roller av regnskap, Inter-organisatoriske relasjoner, nettverk, Offshore Outsourcing

# Master Thesis

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## Preface

### Preface

First of all we would like to express our sincere gratitude to our supervisor Associate Professor Elena Dybtsyna for her guidance, patience and support in difficult situations. We would also like to thank our course coordinator Professor Anatoli Bourmistrov for his inspiring remarks and encouragement. We are very grateful to Associate Professor Levi Gårseth-Nesbakk as well as to Associate Professor Konstantin Timoshenko for their challenging comments and valuable recommendations during the Master Thesis presentations.

We would like to give our special thanks to Sven Falcke, Miratech Country Manager for Norway, for his willingness to help, engagement, support and time spent during the data collection. Without you this research would be impossible!

Finally, we would like to thank our beloved families for their patience, constant support, strong belief, endless love and sweet aid from home.

As the authors we take full responsibility for the content as well as errors of this Master Thesis.

## Abstract

### Abstract

Research of the functions of accounting in an inter-organizational setting is of increasing interest in the field of management control. Especially the research of networks, which consist of multiple dyadic relationships between different actors and entities, is scarcely investigated and it is suggested that research started only in 2004. However, many of the organizations that are organized in such a network face a turbulent environment in which they need to be agile enough to react to changes at any point of time. Since it is suggested that not every company has sufficient resources and knowledge to do each task by itself, the role of outsourcing is inherent as it gives companies an opportunity to outsource activities that somebody else can do faster, cheaper and better.

Literature in the area of usage of accounting in inter-organizational relationships (Caglio & Ditillo, 2012) suggests that accounting has three specific functions, namely an integrative role, an informative role and a decision-making role. However, there are many different types of inter-organizational relationships and therefore the question arises, whether these functions are inherent in each type of these relationships or if the usage of accounting varies with the type of the relationship. Thus, the aim of the study is to increase the knowledge on the usage of accounting information in inter-organizational relationships through an analysis of the specific context of a multinational offshore outsourcing provider in the IT industry.

Using a case study approach that is supported by a structured literature review it is found that the suggested framework is in general applicable, however, the authors conclude that the proposed roles are too broad to explain what functions accounting has in the inter-organizational relationship. It was found that each of the three roles entails many other roles that need to be mentioned to explain what role accounting has in inter-organizational relationships. The authors found for example that the proposed integrative role in relation with the customers entails 8 different functions that serve for instance to solve conflicts and help managers to communicate through the use of a common language. The fact that the proposed framework includes many different functions was also found in the inter-organizational relationships within the organizational boundaries of the network of the analyzed company Miratech.

**Keywords:** Accounting Information, Roles of Accounting, Inter-organizational Relationships, Networks, Offshore Outsourcing



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### 1. Introduction

The introduction to this master thesis is structured in the following way: first, the authors will outline the background for research on the topic of the functions of accounting in inter-organizational relationships, then the aim of the study will be presented in conjunction with the proposed research question, and finally the structure of the thesis will be presented.

#### 1.1. Background of the research

Within the current business environment with increasing competition from both national and international competitors, companies need to find solutions to become more agile and efficient. Since only very few organizations possess the necessary resources to complete every single production and service process in the best possible way on their own, it is supposedly common practice to either “form clusters of quasi-integrated partners” (Caglio & Ditillo, 2012: 58) or to outsource internal activities to external companies with more expertise.

While it is argued that there has already been a lot of research of inter-organizational relationships in strategic and organizational contexts (Caglio & Ditillo, 2012), Seal et al. (1999) point out that researchers seemed to be much less interested in the “nature, type and roles of accounting information” (1999:303) that is necessary for the management of such relationships. However, Caglio & Ditillo (2008) show in a review of the management accounting literature that the topic received much more attention within recent years. Apparently, the role of accounting information is far from being resolved and the views of researchers range from completely questioning the role of accounting information towards contributions that acknowledge the role of accounting as facilitator of inter-organizational relationships. Dekker (2004) with reference to earlier works on the issue of inter-organizational control, supports the latter view, arguing that both “management accounting and control seem to be of substantial importance for the management and performance of IORs”. In that respect, other works (e.g. Caglio & Ditillo, 2012, Seal et al., 1999, Mouritsen et al., 2001) also

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highlight the possibility of exchanging accounting information in the form of so-called open book accounting with the external partner.

Seal et al. (1999) mention further the fact that much of the research in accounting use in supply chains has been heavily influenced by researchers from Japan, where the topic was much more prominent than in Europe or the US. The authors, while providing more evidence on manufacturing in the UK, call therefore for more research on the topic with respect to companies outside of Japan. However, this call for more research seemed to have attracted many other researchers and there have been much more articles from other geographical regions as well. Håkkansson & Lind (2007) state that within the last decade there has been increased research in diverse industries and regions. This research however appears to show an interesting change in the inter-organizational setting. The authors argue that there are now both more extensive business relationships and at the same time “a break-up of large hierarchically controlled companies into constellations of much more independent units that are supposed to find efficient ways to relate to each other” (Håkkansson & Lind, 2007:886-887). It is suggested that this change within the inter-organizational setting also changes the way in which accounting is used by the companies.

Far less studies have analyzed the usage of accounting in inter-organizational relationships of a network, i.e. when companies have several relationships with different entities at the same time, and Håkkansson & Lind (2007) point out that the first studies within this area of research have come up starting only from 2004. Kajüter & Kulmalla (2005), for example, have looked at the role of accounting with respect to the technique of open book accounting within network relationships. They argue that open books within a business relationship can enhance the partnership and lead to highly increased efficiency. However, such results cannot always be achieved and opening the books to the business partner could even destroy the relationship if it is not done in a correct way. While adopting a contingent view on the issue, the authors investigate open book accounting in more detail and point out several points for why the technique of open book accounting might not always be the optimal, if it is not done in a correct way. They show that external factors like competition; network-specific factors like mutual trust among the business partners; as well as firm

specific factors like deficiencies within the cost accounting systems of the companies could pose major obstacles for the implementation of open-book accounting in the business relationship.

### **1.2. Aim of the study and research question**

Håkkansson & Lind (2007) state that there has already been research of the use of accounting in diverse industries, however Caglio & Ditillo (2012) call for more research in industries with similar characteristics to the fashion industry. Their own study, which concerned the role of accounting in the fashion industry, suggests that accounting can take on an integrative role, an informative role and a decision-making role. The authors argue that the characteristics of this industry, i.e. “symbolic production, short cycles and mass customization” have influenced other industries like the mobile and computer industries. Therefore, it would be of high interest to investigate if the same roles for accounting could be found within these “less symbolic industries” as well. Thus, it is the aim of this study to add to the knowledge of the use of accounting in inter-organizational relationships, by analyzing a multinational offshore outsourcing provider in the ICT industry. Moreover, the study aims at analyzing the roles that have been proposed by Caglio & Ditillo (2012) for the fashion industry, in order to find out if the suggested framework is true for the specific context of inter-organizational relationships of a multinational offshore outsourcing provider as well.

As it is proposed by Caglio & Ditillo (2012), the ICT industry is supposed to possess similar characteristics to the fashion industry and the analysis of a company in this industry is therefore of high interest. Moreover, it is suggested that multinational companies are to be seen as networks and both the relationships between the entities within the organizational boundaries within the company should be seen as inter-organizational relationships, as well as the relationships to other actors like the clients or public agencies.

The choice of the case of the multinational offshore outsourcing provider “Miratech” can be explained with the statement of Håkkansson & Lind (2004), who point out that

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the relationships of companies, which are intertwined in a complex system have received little attention in the past. Moreover, the authors point out that scholars in the past have been mostly focused on simple singular relationships between the business partners. Miratech, however does have multiple relationships with customers and between its own operating units, making it a much more interesting case to investigate.

In relation to the aforementioned problem statement it is supposed to formulate the following research question:

*What are the roles of accounting for inter-organizational relationships in the network of multinational offshore outsourcing providers?*

### 1.3. Structure of the thesis

This master thesis is structured in the following way: In the first part of this thesis, the authors will give an insight into the theoretical framework that is applied for the discussion later on. Here, a specific focus will be laid on the concepts of accounting, the roles of accounting, as well as a discussion of the specific context that is analyzed. Afterwards the methodology is outlined, describing the way that the data is collected and analyzed. Then the findings of both the case study and additional findings from a structured literature research will be described in more detail. In the fourth part of the thesis, the authors will analyze and discuss the findings from both primary and secondary sources according to their relation with the proposed framework by Caglio & Ditillo (2012). Finally, a conclusion will be given in conjunction with future opportunities for further research.

The structure of the thesis is summarized in the following illustration:

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## Introduction

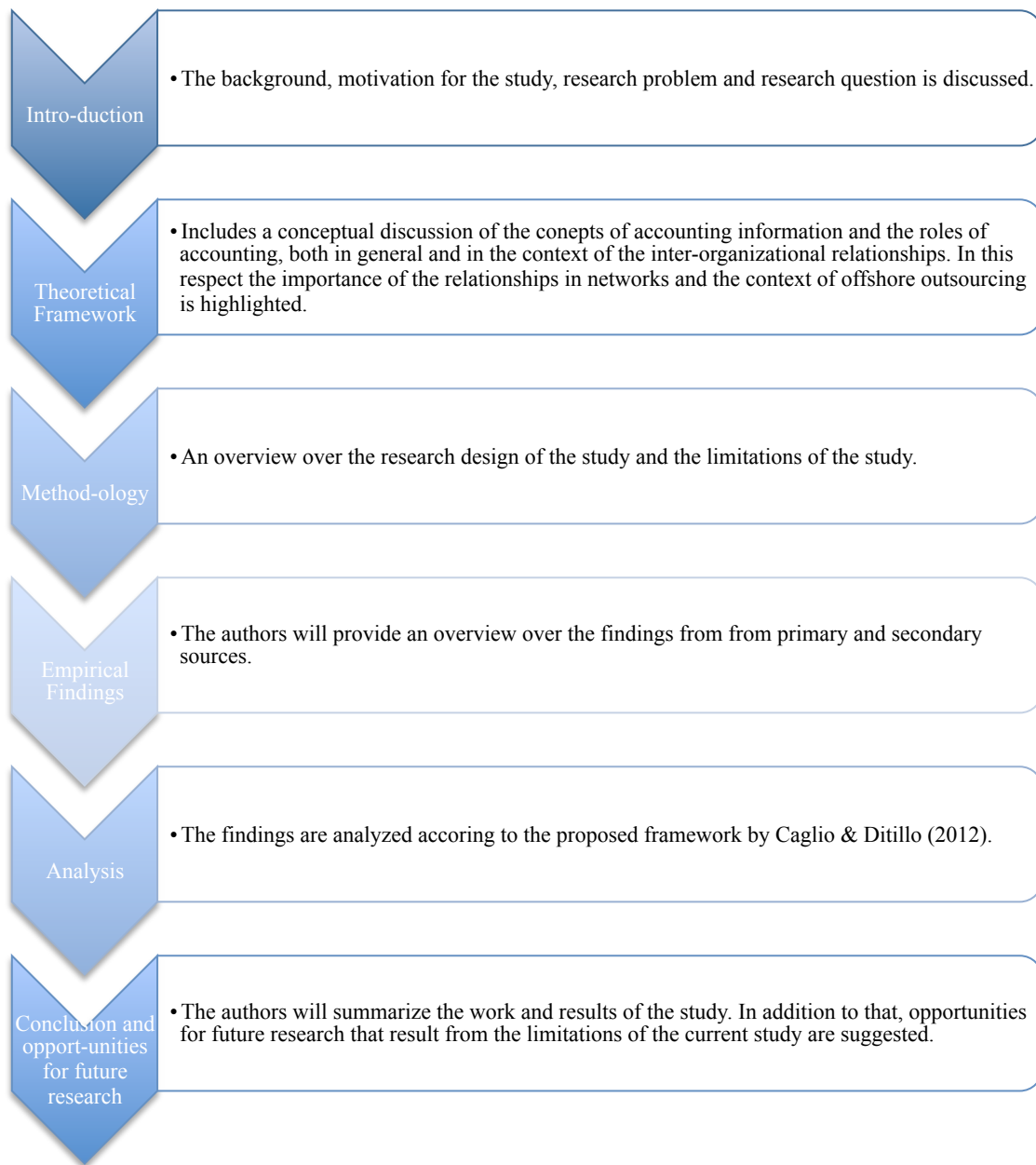


Figure 1-1: Structure of the thesis

(Own illustration)



## Theoretical Framework

### 2. Theoretical Framework

*He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast.*

*Leonardo da Vinci*

Within this theoretical framework, the authors aim at outlining what kind of information the term “accounting information” entails. Furthermore, the theoretical framework will give an overview over the theoretical concepts that stand behind the functions that accounting. Afterwards, the context of the study is described in more detail. Specifically, the authors will describe the differences and similarities of inter-organizational relationships and networks. In addition to that, the authors describe the setting of offshore outsourcing in more detail, as this will add more knowledge to the specific setting of the case study later on.

#### 2.1. Accounting Information

*Accounting is hardly a glamorous activity; repetitious, detail oriented, and methodical, it is not a subject that quickens the pulse. Accounting, it seems, is as exciting as adding up a long column of numbers.*

*(Carruthers & Espeland, 1991:31)*

Riahi-Belkaoui (2004) provides several definitions of accounting issued by different standard setters such as American Accounting Association, Accounting Principles Board, etc. As for example, the Committee on Terminology of the American Institute of Certified Public Accountants defines accounting as following:

*“Accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, for financial character, and interpreting the results thereof”*

*(Cited from Riahi-Belkaoui, 2004:38)*

### Theoretical Framework

Thus, very often accounting is called as the "language of business", because it summarizes the heavy financial and non-financial information into the results of economic activity of the enterprise and, besides, it serves as a communication tool between different business units. As for example, Kirk & Mouritsen (1996) presented an example of accounting as a communication tool that "disciplines managers and helps construct a vocabulary of agendas, motives and concepts of performance" (p. 251). In turn, the authors provided an empirical example of accounting performance usage for formation of causality in the actions of subsidiaries, as well as the space for creation of repairing of the subsidiary's performance by means of explaining, justifying and excusing. Thus, in this particular case accounting was represented as both the instrument to describe the economic history of the subsidiary and tool to arrange dialogue between the headquarters and subsidiary.

Studying the phenomenon of accounting, it is important to understand the differences between financial accounting and management accounting (Hoque, 2003). According to Hoque (2003:3) the main function of financial accounting refers to "stewardship function of business". In other words, financial accounting serves for the external reporting purpose, providing information according to the reporting standards. In addition, Garrison et al. (2008) defining the differences between the aforementioned two kinds of accounting, suggest that financial accounting is used for the purposes of stockholders, creditors, and other external users, when the management accounting, in contrast, is used by the internal users in order to direct and control company's operations.

When it comes to the accounting information, we can define it as the one that is used for financial analyses in order to interpret the company's reality and its condition in its operating environment (Nicoleta-Cornelia, 2012). Nicoleta-Cornelia (2012) states that accounting information appears on the overlap of accounting and financial analysis (Figure 1). Besides, the author marks out so-called "extra-accounting information" that refers to the "the strategy of the company, the organization, commercial function and personal information" (p. 532). In other words, the author names the information related to the organizational context, that is not financial information, but that is used for the accounting process as the extra-accounting

Theoretical Framework

information. Graphically the accounting and extra-accounting information are presented in the Figure 2-1.

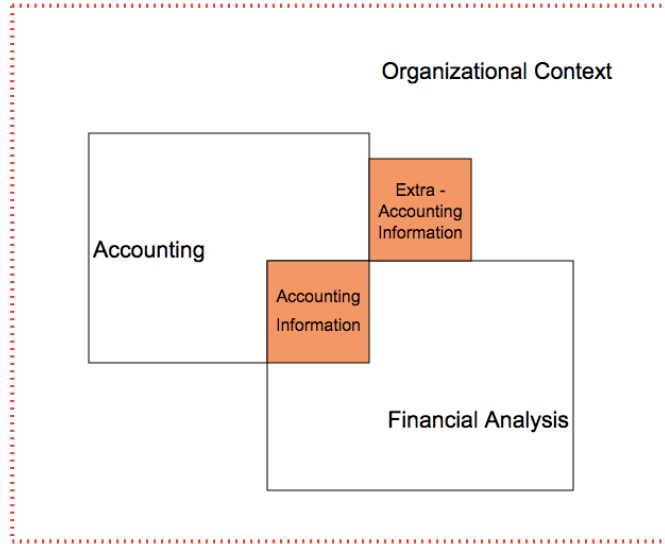


Figure 2-1: Accounting and Extra-Accounting Information

[Source: adopted by authors from Nicoleta-Cornelia et al. (2012)]

The main condition for financial accounting information, if it should be of any relevance to prepare it, is that it should be useful for the users, i.e. that users can base their economic decisions on the presented information (Riahi-Balkaoui, 2004). In the past, the Financial Accounting Standards Board (FASB) has received criticism that this criterion was not met. The Canadian Institute of Chartered Accountants Research Study “Corporate Reporting: its future evolution” (CICA, 1980) pointed out that the FASB did not require the preparers of financial statements to present accounting information which is both interpretable and useful for possible users. Therefore, the question aroused how accounting information could become more relevant to its users?

First of all it is necessary to clarify the characteristics of possible users of the information that is presented. According to Kordlouie et al. (2014), users of accounting information and management accounting information that is prepared for financial reporting include mostly internal representatives of the company. The authors mention, e.g. the staff that might need information, as well as managers that can use the information for their decision-making. However, external users will also

### Theoretical Framework

use accounting information. Mentioned are, for example, shareholders, banks, further creditors and state organizations. Vergoossen (1993) and Chang et al. (1983) sort the three most prominent user groups of external financial reports as shareholder, bankers, and investment analysts. Vergoossen (1993) states that shareholders would perceive accounting information mainly as input for investment decisions, while bankers would use such information, in order to gain more insights into the creditworthiness of companies. Investment analysts function as an intermediary, who use and supply information at the same time. Additionally, Young (2006) shows that it is important to mention the underlying characteristics of an accounting information user. Specifically, he states that the assumption of a rational decision-maker is crucial. If the decisions that are made are rational, all irrational behavior can be disregarded and, thus, information like the prediction of future cash flow can be relied on, even though it includes a lot of uncertainty.

However, Riahi-Belkaoui (2004) points out another issue that needs to be solved for a clear picture on what information should be relevant. The author states that there is a conflict of interest between the users, the corporations and the accounting profession. While it is obvious that a user objective is the most important and the one that should be predominantly taken care of, all of these parties have to be taken into consideration when deciding on which characteristics should make financial information relevant.

The FASB responded to these issues by issuing the conceptual framework of accounting information that has the goal of clarifying the objectives of accounting information in a hierarchical order. A clear picture of the objectives that accounting has should simplify the work of preparers (the corporations), the work of employees in the accounting profession that need to state if the information is conform with the requirements towards useful information, and it should be helpful to the users by standardizing the information and making it thus more comparable and useful for decision-making (Riahi-Belkaoui, 2004). Specifically, one part of the conceptual framework, the Statement of Financial Accounting Concepts No.2, outlines the qualitative characteristics that accounting information should possess, in order to be useful for decision-making. Moreover, these characteristics make it possible for the preparers of accounting information to choose between different kinds of information,

Theoretical Framework

namely “1. alternative accounting and reporting methods; and 2. disclosure requirements” (Riahi-Belkaoui, 2004:185) thus, making the information more relevant. Figure 2-2 shows the hierarchy of the qualitative characteristics:

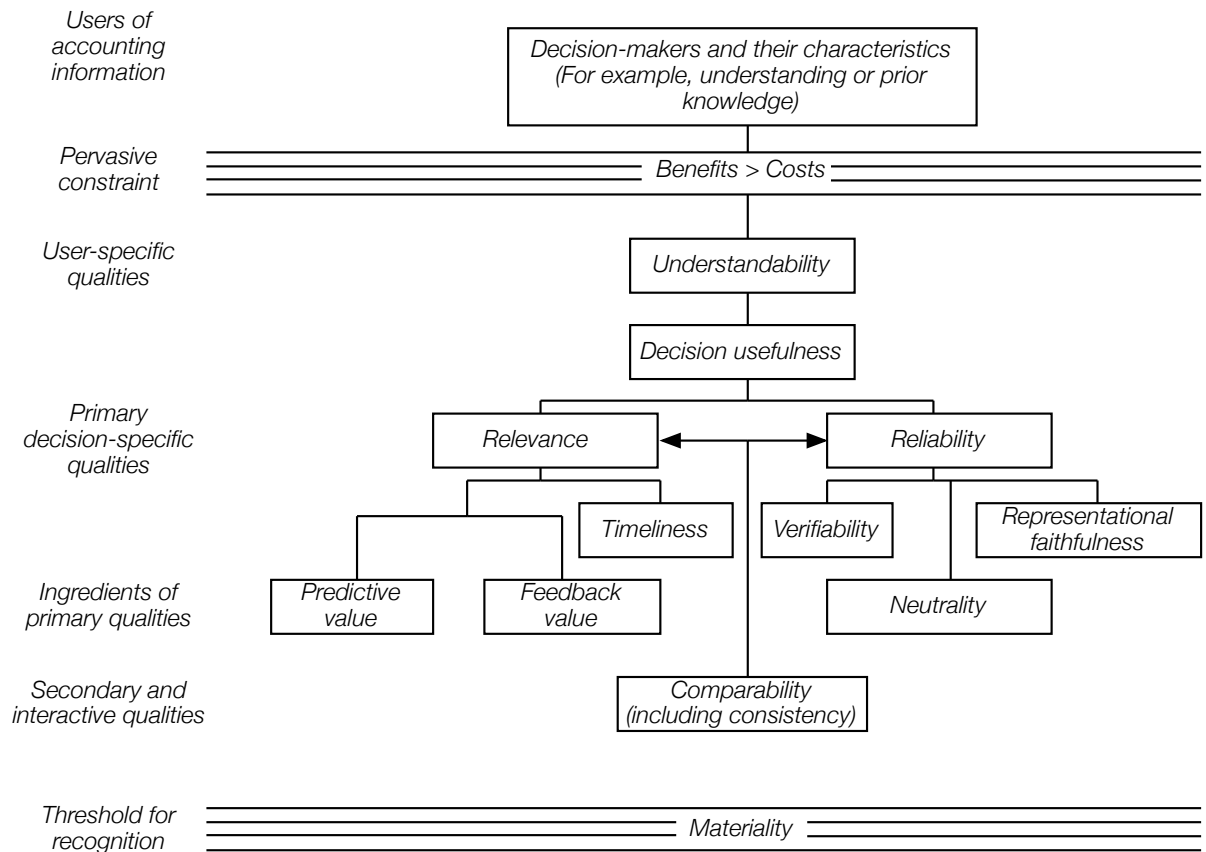


Figure 2-2: The qualitative characteristics of accounting information

(Source: Riahi-Belkaoui, 2004: 186)

According to this framework, the usefulness for decision-making is highlighted as the primary issue that accounting information must provide input to. The information that is provided must be both understandable and useful. The issue of decision usefulness is further broken down into the two primary decision-specific qualities *Relevance* and *Reliability* and their respective ingredients. Riahi-Belkaoui (2004) describes that relevance implies the ability of information to make an impact on the manager’s mindset. If accounting information should be of relevance, then it must be able to influence a decision and therefore support the user. This can be both in terms of the

### Theoretical Framework

information that is given about the past (the *Feedback value*), as well as information that is given about future events (the *Predictive value*). Moreover, the information must be presented on a timely basis (*Timeliness*). If the information is not available to the user before he or she needs it, the user will not be able to change its mind. Thus, the information would be irrelevant and therefore not useful.

In addition to being relevant, the information must also be reliable. The user should be able to base its decisions on the presented information and it must therefore be correct, or at least it should faithfully be free from mistakes. Riahi-Belkaoui (2004) points out that the reliability will depend strongly on the user of the information as different users will be able to rely upon different information (depending on how much preliminary knowledge one must have to understand it). However, with all information it must be possible to verify the correctness (*verifiability*). Moreover, the information must be prepared without personal interference. The preparer must be *neutral* and should not adapt the information towards any direction. This is in line with the *representational faithfulness*, i.e. that the data must correspond to the events that it represents. If this should be the case then the users can build their decisions upon the information.

According to the FASB, accounting information does also possess secondary qualities, namely *comparability* and *consistency*. These characteristics hint towards the fact that the preparer should use the same methods over time so that it is easier for the user to compare data from before with the current data. It must however be mentioned that it is indeed possible to change the accounting policy or particular techniques, if environmental influences should make this necessary.

In addition to the prior mentioned characteristics, it is obvious that the benefits that are derived from the information should exceed the costs of preparing the data. In the framework this is denoted as a pervasive constraint, meaning that if the *cost-benefit considerations* are not in favor of the benefit then there is not sufficient benefit for the user and the information should therefore be not prepared. Similarly, *materiality considerations* must be in favor of the user benefit. Gårseth-Nesbakk & Mellemvik (2011) show that three factors, namely over-inclusion, omission, and misrepresentation during the preparation of the accounting data can influence the

Theoretical Framework

decision usefulness of the user. If the user should not consider the information as material, then the information is not useful and can thus not be used during the decision-making process.

In the end of 1960s the issues about insufficiency of only financial information for the managing and control of the companies in uncertain environments arised. Thus, it became necessary to distinguish between measurable and non-measurable, but important for future events and decisions (Joplin, 1970). For the remainder of this thesis, the authors want to follow Hoque (2003), who, while describing the attributes of management accounting system information of Gordon (1998), states that the accounting information can be both financial and non-financial. In turn, every group contains internal and external information, that also can be divided by ex post and ex ante information. The structure of the management accounting system information is presented in the Figure 2-3. Thus, internal information contains information about the affairs of the particular company, and the external information refers to the one of the competitors. Ex post information refers to the past activities and the results of such activities, and the ex ante information refers to the predictions regarding some planned activies. As for example, the cost of the production of a particular company per unit during the last year is referred to ex post internal financial information, while the same information of the competitor of this company will be ex post external financial information.

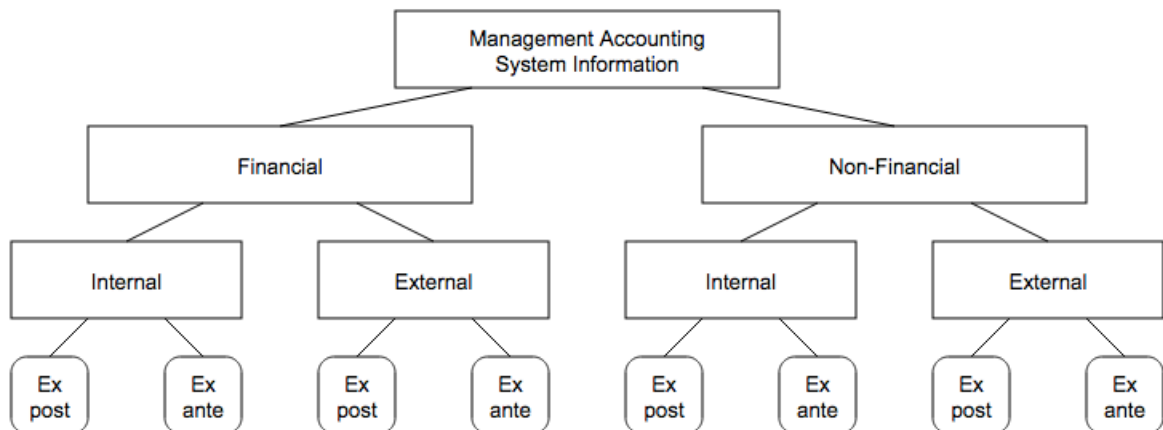


Figure 2-3: Attributes of the MAS information

### Theoretical Framework

[Source: adopted by the authors from Hoque (2003)]

In addition, Kurniawati et al. (2013) classify accounting information by the form of presentation, namely written (records, reports, notes, documents, etc.) and unwritten (memories of managers, estimations, etc.). Besides, the authors distinguish accounting information by the types of business characteristics of the enterprise that produces and/or uses such accounting information. They name, for instance, sales information that is produced by the service, merchandising and manufacturing business. Furthermore, Kurniawati et al. (2013) classify accounting information of small and medium sized enterprises as accounting information, budgetary information, and additional accounting information. Here, accounting information is defined as the one that is prepared according to the existing standards; budgetary information is defined as the one that represents a company's planned activities in appearance of budgets; and additional accounting information is supplementary information that is used in order to support decision-making processes of the company.

## 2.2. Functions of Accounting

### 2.2.1. Intended vs. Unintended Functions

In a conceptual discussion of “the functions” of accounting, Gårseth-Nesbakk and Timoshenko (2014) point out that the definitions that can be found in the dictionary do not capture the concept in its entirety as they mostly refer to the intended normative functions but not to the unintended functions that accounting can have in practice. Therefore, the question arises why this could be the case and what other functions accounting might possess in “action”.

Burchell et al. (1980) discuss the fact that in a traditional view, accounting is supposed to have a functional core. This core is supposed to make the public believe that the information that is provided by accounting is relevant for decision-making. Moreover, accounting is supposed to be concerned “with the achievement of a “rational allocation of resources” and with the maintenance of institutional



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“accountability” and “stewardship” (1980:10). However, the authors state that such “functional claims” about accounting information have been developed in theory and on distance from the actual professional practice. Mellemvik et al. (1988) discuss the issue that there must be a distinction between the functions that accounting should have in theory (the intended functions) and the functions that accounting takes on in practice (accounting in action). The authors show that while the intended functions should possess the qualities of reducing uncertainty for decision-making and accountability purposes, this is not always the case in practice. Thus, it is suggested that accounting is more complicated as it is strongly intertwined with its context (Gårseth-Nesbakk and Timoshenko, 2014). Different individuals can see the role of accounting in a different way and therefore it can take on other functions. Thus, Mellemvik et al. (1988) suggest the following functions that accounting information might have for different organizations (illustrated by Figure 2-4):

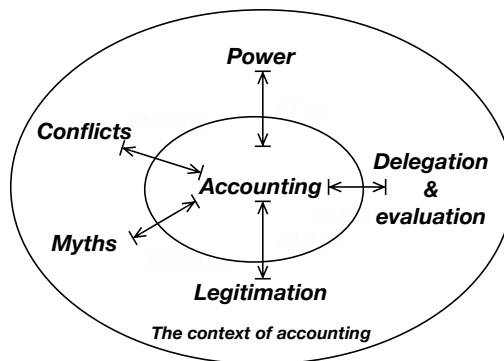


Figure 2-4: The functions of accounting

(Source: Mellemvik et al., 1988:114)

First, it is suggested that accounting can fulfill an important role in legitimating organizations in their environment. Through accounting reports that are published on a regular basis, companies can “talk/communicate” to their environment, thus justifying the use of resources. This justification could be both ex-ante and ex-post. A budget, for instance, communicates (justifies) the decisions on the use of resources that will be necessary in the future, whereas financial statements like the statement of income or the cash flow statement communicate (justify) decisions that have been taken in the past on the usage of resources (Brunsson, 1986; Mellemvik, et al., 1988).

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Second, accounting has an important role in both understanding myths from the environment and forming myths that can be used by other actors. Apparently, accounting information helps, on the one hand side, to make sense out of uncertain situations through the assignment of specific numbers to it. That way the users of this information can understand it easier and build their decisions on it in the future. On the other hand side, accounting information communicates, for example, expectations towards the employees. That way it produces myths that can easily be understood by its users.

Third, due to the fact that accounting information carries vital information on power, it has an influence on the power structure of an organization. The individual or organization with the most amount of power can oppose himself to any actions that would decrease his/ its power. Moreover, through manipulation of such information, it is theoretically possible to increase the power of individuals or even the whole organization.

Fourth, it is proposed that accounting has a function in the creation, maintenance and solving of conflicts. The issue of conflicts in organizations occurs due to social interdependencies between two parties, e.g. individuals or organizations. On the one hand side, accounting can contribute to these interdependencies by providing necessary information about e.g. responsibilities, thus reducing the conflict between parties. On the other hand side, accounting in the form of financial statements like the budget, offers possibilities for the creation and maintenance of conflicts, since different parties will have different opinions about certain issues.

Finally, Mellemvik et al. (1988) propose that accounting has a function in the delegation of responsibilities and evaluation. Since accounting is supposed to reflect the different entities, parts, and activities that are relevant for the organization, it shows clearly which individual is responsible for which task, etc. Therefore, it helps to delegate responsibilities within the company. In addition to that, accounting information can be useful for managers to evaluate their collaborators. However, it must be mentioned that too much reliance on such information might be subject to manipulation and accounting information should therefore handled with care.

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There are several reasons for why the functions of accounting in action differ from the functions that are intended in the theory. Trying to understand the underlying reasons more clearly, Mellemvik et al. (2005) present a model that aims at explaining how accounting is formed within its environment (Figure 2-5). It is suggested that the way accounting is formed in practice and the use of accounting is strongly influenced by norms. While each of these factors has an influence on the other factors (also in relation to environmental factors), the model implies that the norms, practice, and use can develop independently from each other. Thus, the use of accounting might be different from what is outlined by the norms or practice and vice versa (intended by the arrows in the upper right corner).

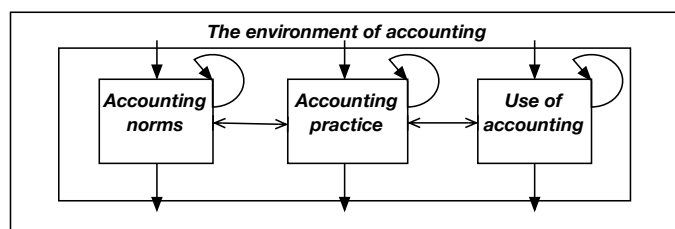


Figure 2-5: The accounting process

(Mellemvik et al., 2005:313)

Taking reference to the proposed model by Mellemvik et al. (2005), Gårseth-Nesbakk and Timoshenko (2014) state, “at least when it comes to the intended functions, they seem to relate primarily to the user dimension” (2014:148). However, the functions of accounting in action can in fact relate to all three elements. The authors show that, for example, legitimization could relate both to the use of accounting, i.e. when reports are used to justify a certain activity, and the norms, i.e. when accounting principles are influenced through e.g. political processes.

In addition to the findings by Mellemvik et al. (1988), Riahi-Belkaoui (2004) describes more detailed that accounting can be viewed as “various images” (2004:98). In particular, he states that accounting could, for instance, be seen as an *ideological phenomenon*, which is invented in order to sustain and legitimize the current “social, economic, and political arrangements” (2004:98). In addition, he shows that accounting can be perceived as a *language* for business communication. Moreover, accounting could be seen as a *historical record* of an organization, which describes

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the economic activity of the entity in the past. Accounting can further be seen as the *current economic reality*. Riahi-Belkaoui states that the objective of accounting within this image would be to reflect “true income” (2004:101) through a reflection of current and future prices. It is however suggested that it has not yet been clarified which methods would be able to predict this best. Furthermore, accounting can be viewed as an *information system* between the source of information and external users through means of communication. Accounting can also be viewed as a *commodity*, resulting from the economic activity of an organization; as a *mythology* that produces rather myths than reality in order to make the reality more understandable for users; as *rationale* that can explain given events; as *imagery*, due to the fact that accounting contributes towards building a certain picture of a company; as *experimentation*, since companies have the freedom to test which methods and techniques are most suitable in their given context; and finally, as a *distortion*. Distortion is important, since companies may be able to influence the users through manipulation of financial statements, thus producing a wrong image of the company.

#### 2.2.2. Functions of accounting in an inter-organizational setting

According to the guest editors of the special issue of the journal “Management Accounting Research” on the topic of management control of inter-firm relationships, Jeltje van der Meer-Kooistra and Ed G.J. Vosselman, transactional relationships between companies “require the co-ordination of resources and activities between the co-operating parties” (2006:228). The authors point out that while such co-ordination might be easily achieved in hierarchical relationships with a strong headquarter, this might not be the case with companies that have different and perhaps conflicting interests. Additionally, the relationships are usually based on a long-term relationship between the different parties and it is therefore difficult to predict each possible scenario when contracts are signed. Ezzamel (2009) shows that accounting can be a vital part in establishing a certain order within the relationship between the different parties. Adopting the image of accounting as a technique and “heavenly order”(2009:349) he states that accounting, even in its simplest form, is “endowed

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with numerical organization that could be deployed to create an ethos of order” (2009:353). Caglio and Ditillo (2012) provide for a framework that can be used for the analysis of the functions that the exchange of accounting information has for the management of interdependencies in inter-organizational relationships. The authors claim that within inter-organizational relationships, the activities that cross the organizational borders need to be planned on the level of the relationship with the partner. Therefore, they are much more difficult to steer than activities that affect entities within one company, since such issues can be solved by the implementation of a hierarchy. A centralized organization of the company would lead to the case where decisions are made centrally from within the headquarters, thus leaving no questions as to whom should solve issues and make decisions. Within inter-organizational relationships, where activities need to be controlled in collaboration with the partner, such a hierarchy is, dependent on the specific model, usually not given. Therefore, it is suggested that there are specifically three functions that the exchange of accounting information has in relationships between different parties. These are namely an *integrative role*, an *informative role*, and a *decision-making role*.

**Integrative Role:** Caglio and Ditillo (2012) show that inter-organizational cost management techniques like *standard cost setting* can be useful for partner organizations to get used to each other. It becomes easier for the partners to understand the objectives that the other party has for the cooperation. Moreover, possible constraints that might occur from the cooperation can be solved from the early beginning, thus making the integration of the relationship between the two parties significantly easier. This is specifically true, since both sides can evaluate the economic feasibility of the cooperation before a contractual agreement is set up. Closely related to the inter-organizational cost management techniques is also the *communication process* between the two parties. It is suggested that the parties use accounting information during the communication process to establish a successful cooperation that can be extended in the future. Both sides can express their expectations towards the partnership and state which goals should be achieved within a given timeframe.

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Informative Role: Within the case that was presented by Caglio & Ditillo (2012), the exchange of accounting information enabled the organizations to keep control over each other. Specifically, *variance analysis* made it possible to stay informed over each step that was taken by the supplier company. In addition to the monitoring ability, the exchange of accounting helps further to carry out operations and projects in a joint collaboration. This is mainly due to the fact that the information that is provided through accounting data, gives immediate feedback on the operations. If something is out of line, the data helps both companies to detect mistakes on a timely basis so that adjustments, e.g. in the manufacturing process, can be made without a loss of time and quality. Moreover, this information also shows if the partner is compliant with the responsibilities that have been agreed upon in the beginning of the relationship. If this should not be the case, the relationship could be reevaluated and alternatives might be considered.

Decision-Making Role: Caglio & Ditillo (2012) show that the exchange of accounting information also supports the decision-making of managers within the company.

Accounting information can e.g. provide the necessary data to make considerations about the classical “make-or-buy” decision. Here, managers have to make decisions on whether the company can provide a product or service cheaper and better by itself or if it makes sense to buy it from another company. According to the authors, especially standard costs could be used to constantly evaluate the economic feasibility of the existing partnership. Likewise, accounting information permits managers to constantly evaluate the feasibility of projects that cross the organizational borders and can therefore improve and sustain the inter-organizational decision-making of the managers of both parties.

### **2.3. Inter-organizational relationships and networks: A conceptual discussion of the context**

Within the literature there exist a lot of concepts, which are related to companies that engage in cooperation with other entities both on the national and international level. Indeed, Håkansson & Lind (2004) show that large international companies face

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increasingly more complicated issues with regard to the changing boundaries of the firm within the environment. This is especially true for companies that engage in “joint ventures, alliances, strategic partnerships, outsourcing” (2004:51), or companies that are decentralizing their operations. The authors state, that especially from accounting point of view, such “blurring” of boundaries may cause a problem as “contemporary accounting depends on defined, limited entities” (2004:52). Since these clearly defined boundaries do not exist in this context, it can be expected that the way accounting is used will differ in some way from the traditional roles in a single company.

Relationships between companies and within different entities of a single firm can be set up in different ways. Researchers in the management control literature used to be mostly concerned with control of vertical relationships between buyers and suppliers, as they are common in most supply chains for example. However, in a thorough analysis of the management control literature in an inter-organizational context, Van der Meer-Kooistra & Vosselman (2006) show that in recent years this focus changed dramatically. The authors point out that especially the papers by Otley (1994), showing that the legal boundaries of an entity do not restrict the scope of management control; and by Hopwood (1996), calling for more research on the horizontal relationships, have had an impact on the management control literature. It is suggested that since then there has been a greater interest on relationships in “various interfirm transactional relationships”, as well as “relationships between the various parties within a network” (Van der Meer-Kooistra & Vosselman, 2006:228).

However, the question arises what is the difference between such interfirm and network settings. Moreover, during the authors’ research on literature for this thesis, there seemed to appear more than one word for essentially the same concept. Therefore, the authors aim at defining these different concepts and setting a boundary for the context that should be applied during the analysis of this thesis.

#### 2.3.1. Inter-organizational Relationships

Caglio & Ditillo (2012) show that there are only very few companies which possess all resources and the best knowledge that is necessary to compete in today's market. It is much more likely that companies need to find partners with whom they can either form "clusters of quasi-integrated partners" or to whom they can "outsource internal activities" (2012:58). Classical social exchange theory defines exchange relationships as a "two-sided, mutually contingent, and mutually rewarding process involving "transactions" or simply "exchange"" (Emerson, 1976:336, see also Blau, 1968). Van der Meer-Kooistra & Vosselman (2006) state that these exchanges in transactional relationships require companies to coordinate their activities and resources.

According to Dekker (2004) there are mainly two aspects that make relationships between two entities difficult: the first one is the coordination of resources while the second one is appropriation concerns that can occur due to possible opportunistic behavior by the firms. Much of the relationship is therefore built on trust, since it cannot be guaranteed that the service by one party will be performed as expected. Literature in the area of transaction cost economics (Williamson, 1985) picked up this thought, arguing that appropriation concerns make it necessary for the partners in an inter-organizational relationship to protect their own interests against opportunistic behavior of the partner. According to more recent management control literature (e.g. Tomkins, 2001), accounting can provide the necessary control tools to keep the relationship in order. However, Uddin (2013) points out that, according to the industrial network approach, "interorganizational trust, reciprocity, and continuity" are "essential for inter-organizational relationships" (2013:102). Therefore, it is clear that within inter-organizational relationships it is of crucial importance to have a partner that can be trusted, since even the best contractual arrangements do not protect entirely.

The original markets and hierarchy model (Williamson, 1981) suggested that there are only two contexts within inter-organizational relationships, namely the market with contractual relationships, and the hierarchy within one company. However, today there exist a variety of different inter-organizational relationships in which firms



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might be involved (see appendix B for an illustration of the different inter-organizational forms, as suggested by Mena et al., 2009).

All of these relationships differ in the amount of collaboration between the involved partners, meaning that relationships could vary from close collaborations between entities of one firm, so-called *intra*-organizational relationships, towards *inter*-organizational relationships between two separate firms on a contractual basis with low collaboration. Therefore, Cooper & Slagmulder (2004) suggest that the original continuum between hierarchy and market might not hold any longer and that hybrids should be viewed in a more three-dimensional space between hierarchy, market and a new factor called “trust”. Similarly, while analyzing different control patterns that companies might adapt during the inter-organizational relationship, Van der Meer-Kooistra & Vosselman (2000) suggest a model, which draws upon the classical model between a market-based pattern and a bureaucracy-based pattern. However, the authors include a third pattern that includes trust, in order to show more realistically that today there are many inter-organizational relationships that are mostly build on trust as the main control mechanism. Their model, which is useful during the analysis of any given inter-organizational relationship, since it includes different stages of the relationship, is illustrated in the following table:

	Market based pattern	Bureaucracy based pattern	Trust based pattern
Contact phase	Competitive bidding	Preselection of potential suppliers; bidding procedures; detailed selection criteria	Trust, stemming from friendship, former contractual relationships or reputation
Contract phase	No detailed contracting; payment based on standardized activities or output	Detailed and comprehensive contracting; payment based on real activities or output	International contracting; framework contracts; contractual trust; loose links between payment and activities and output
Execution phase	Periodical, ex post competitive bidding	Supervision; performance measurement and evaluation; detailed ex post information processing; direct intervention	Personal consultation and coordination; development of competence trust and goodwill trust; process oriented and culture based control mechanisms

Table 2-1: Management control patterns in inter-organizational relationships

(Van der Meer-Kooistra & Vosselman, 2000:60)

Tomkins (2001) shows clearly why the factor trust in inter-organizational relationship is important to consider. It is inherent that companies have a higher need for information when companies have less trust in their partner, compared to situations

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where companies can trust their partner completely. Therefore, it could be suggested that the need for more accounting information will be higher when there is less trust, in order to keep some kind of control over the relationship with the organizational partner. Tomkins (2001) suggests an inverted U-curve (illustrated by Figure 2-6) that is supposed to illustrate the need for information in comparison to the level of trust over the course of a given time period.

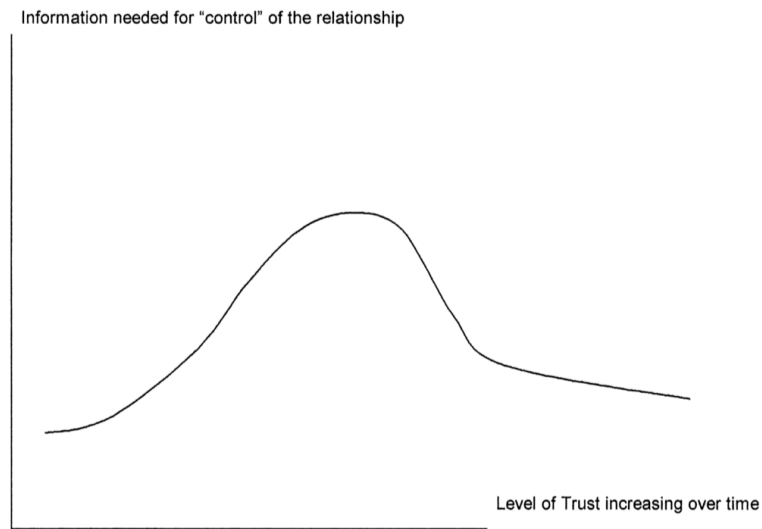


Figure 2-6: The relationship between trust and the need for information

(Tomkins, 2001:170)

While most of the literature refers to inter-organizational relationships as relationships between two different companies with conflicting interests, Ghoshal & Bartlett (1990) show that the intra-organizational relationships within the network of a multinational company possess very similar characteristics. Therefore, the network of such an entity should be considered as an inter-organizational network that lies within the organizational borders of a single firm, but has connections to separate entities, such as customers, suppliers, regulators and others. Thus, it is proposed that for the analysis of a multinational company, all relationships within the organizational border and relationships that cross the organizational border should be considered as inter-organizational relationships.

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During the authors' research on the topic of the functions of accounting in an inter-organizational setting, it became soon obvious that there are several ways to name the concepts of the context. While most authors in the literature choose to name the relationships between two companies as "inter-organizational" relationships, there are others who call the exactly same phenomenon as "interfirm" relationships. Also, there seems to be no standardized way of writing the words. While there are some authors that write inter-organizational relationships with a dash (-) to connect the words inter and organizational, there are others who see it as a single word called "interorganizational" relationships. The same is true for the word "interfirm", which can be written either with a connecting dash or as a single word. This observation seems to be much in line with Caglio & Ditillo (2008), who point out that authors in major journals have referred to the setting as "'inter-organizational relationships', 'inter-firm settings', 'hybrid organizational forms', and 'networks'" (2008:866). However, during the course of this thesis, the authors will refer to the setting as "inter-organizational relationships" and only if the use of this word becomes too extensive might refer to it as "inter-firm relationships".

Moreover, due to the fact that there are several different hybrid versions of inter-organizational relationships and since these relationships might involve more than just two companies with dyadic relationships, the authors refer to "inter-organizational relationships" as the overall phenomenon. It is suggested that networks (which will be discussed afterwards) and value chains are more specific kinds of inter-organizational relationships. Therefore, they are seen as a part of this concept. In addition to that, the authors will refer to the previously discussed intra-organizational relationships as a kind of inter-organizational relationship. The prefix "intra" will be applied once there is a need to specify the relationship as one that takes part between two entities within one single company.

#### 2.3.2. Networks

Until recently, literature in management accounting has mostly focused on dyadic relationships in an inter-organizational setting (e.g. Caglio & Ditillo, 2008, Lind &

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Thrane, 2005). However, Lind & Thrane (2005) propose that accounting in inter-organizational relationships should rather be analyzed in a “network dimension” within both “bounded and unbounded relationships” (2005: 116).

According to the “Encyclopedia of Management Theory” (Jones & Van de Ven, 2013), an inter-organizational network is defined as “a set of organizations related through common affiliations or through exchange relations”. In addition to that, Emerson (1981) describes that each network must possess certain properties that differentiate it from simple dyadic inter-organizational relationships. Among these properties are:

1. a given set of actors (persons or corporate groups);
2. resources that are valued by the actors;
3. a set of opportunities for each actor to engage into transactions with other actors;
4. a set of historical transactions (exchange relations);
5. a set of network connections that link exchange relations to a network.

Moreover, networks can be either vertically oriented, acting as a supply chain between different actors, or horizontally, where the different actors collaborate even though they are in fact competing with each other. And networks can be designed as a new entity that is organized on top of the participating entities, for example in the form of an alliance or as a joint venture (Mouritsen & Thrane, 2006).

Networks are becoming of more interest since they do in fact consist of a number of dyadic relationships. Yet, the sum of these relationships must give the companies advantages over the single relationships, if the network should be of any purpose (Anderson, et al., 1994). There are a lot of reasons why companies engage themselves into network relations. As for example, we can name cost reduction, flexibility (Barringer & Harrinson, 2000), sharing of the risk (Trkman & McCormack, 2009), synergy effect (Sroka & Cygler, 2014; Eggers et al., 2014), organizational learning (Barringer & Harrinson, 2000, Eggers et al., 2014), enhancement of bargaining power in the market (Sroka and Cygler, 2014, Barringer & Harrinson, 2000), avoidance of

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devastating competition (Sroka & Cygler, 2014), lower degree of bureaucracy due to the absence of complex hierarchical structures (Sroka&Cygler, 2014), possibility to concentrate on the main activities (Barringer & Harrison, 2000).

Usually the environment of operation of the companies engaged into networks can be characterized as the one with “*high degree of task complexity, coupled with intense time pressures*” (Barringer & Harrison 2000:388). However, Eggers et al. (2014) identified a positive effect of the network relations in the conditions of technological turbulence on the ability of companies to develop radical innovations. The authors suggest that in such a situation the networking operates as a “*knowledge generator*”. In other words, there is a synergetic effect of the cooperation between the organizations involved into the network in terms of creation new knowledge. Besides, the study suggests that technological turbulence provides some short-term opportunities for radical innovation. Thus, the companies that are engaged into the networks have bigger possibilities to detect and use these opportunities in a short-term perspective.

However, some studies state that the aforementioned companies are more vulnerable in turbulent environments. Thus, Trkman & McCormack (2009), studying the supply chain risk in turbulent environments, state that companies become more fragile to the environment when it goes beyond their control. It means that one company can potentially hazard the whole network in the uncertain conditions. The authors suppose that there are two main sources of the risk appearance in the network, namely endogenous and exogenous uncertainties. The first one refers to the risks connected to the relations with the participants of the network, when the second one refers to risks of the external environment. If changing the tactics in relations can reduce the first type of uncertainty, the second type cannot be reduced. Thus, in order to deal with the environment that is hard to predict, the companies engaged into networks have to work on its structure and its ability to respond to the changes proactively. This makes them interesting for the study of accounting use, since accounting information should provide the actors in the network with the necessary input to control the environment and steer the cooperation in a successful future.

#### 2.4. Offshore Outsourcing – The Setting

One specific kind of inter-organizational relationships is outsourcing services. From a technical perspective, “outsourcing” could be defined as «obtaining (goods or a service) by contract from an outside supplier».<sup>1</sup> In other words, companies (hereafter referred to as “clients”) can purchase parts of their products or order certain services from third-part companies (hereafter referred to as “vendors”). Companies can either find such third-part companies inside of the country of company's origin (*domestic outsourcing*), or they can outsource their activities to the other countries (*offshore outsourcing*) (Nakatsu & Iacovou, 2009). Benito et al. (2013:211) defined offshore outsourcing as «*the delegation of specified value chain activities to one or more foreign provider(s)*». In turn, Lakhiri & Kadua (2011) state that clients usually outsource activities that are non-core, in order to concentrate more attention and resources on the activities that contribute more to the value creation process, and in that way, sustain competitive advantage.

Khan and Fitzgerald (2004) suggest that offshore outsourcing can be accomplished through four main business models, namely *direct offshore outsourcing* (where the client finds the vendor without any intermediaries), *third party offshore outsourcing* (where the client operates with the assistance of the agent that operates as an intermediary, finds a vendor and handles the work), *joint venture offshore outsourcing* (where the relationship between client and vendor goes beyond transactional arrangement and provides sharing of the risks and rewards), and *wholly owned subsidiary* (where the client establishes a wholly owned entity in the country other than the country of origin and transfers some of the operational activities to this entity). Thus, we can divide offshore outsourcing into two main groups: offshore outsourcing with establishment of the entity and offshore outsourcing based only on contractual arrangements without involvement into entity ownership.

The reasons for why companies do offshore parts of their operations to other countries are quite diverse. Mukherrje et al. (2013) suggest that there can be both short run (to

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<sup>1</sup> <http://www.oxforddictionaries.com/definition/english/outsource?q=outsource>

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reduce the costs) and long run (to create additional value) reasons. Besides the costs, clients can choose destinations in order to receive access to natural resources, develop business networks or due to “*low interaction distance*”, i.e. relative geographical closeness of the location or cultural closeness (Caniato et al. 2014:2). Furthermore, Caniato et al. (2014:9) studied the effects of the aforementioned factors on the performance of the clients and point out that low costs and availability of natural resources have a direct positive impact on the performance in terms of “*quality, flexibility and access to qualified personal*”. Clients can be looking for vendors, in order to reduce both the manufacturing and labor costs (Gylling et al., 2015), as well as the costs for doing business by “*translating into escalating transactional and operating costs of conducting businesses*” of dynamic business environment (Lahiri & Kadua, 2011:256). Besides, due to the lack of knowledge or experience in some particular areas (for example, engineering, IT, mathematics, etc.) clients can start searching for companies abroad that have enough qualified workers to support the client’s need in “*feeding the growing business*” (Lahiri & Kadua, 2011:255). Moreover, outsourcing the activities to the foreign countries clients can receive access to developed supply chains, increase the scale of manufacturing and improve efficiency of production processes (The Economist, 2013).

There are, however, also reasons for why companies should not offshore their activities. Thorough analysis of operational (for example, transport costs (The Economist, 2013)) and transition costs can outweigh the decision on offshore outsourcing (Gylling et al., 2015). Moreover, some of the companies nowadays start understanding the negative effect of the distance between production and R&D departments on the innovations. However, moving the R&D to the country of production can lead to the problems with the intellectual property rights, as for example, emerging countries have weak systems of rights protection. Furthermore, unpredictable circumstances, such as wars, natural disasters, etc. can also challenge the client’s operational activity and should be considered while making a decision to offshore activities (The Economist, 2013).

In addition to the aforementioned traditional view on offshore outsourcing, Benito et al. (2013) suggest looking at offshore outsourcing as at a dynamic process. Thus, the

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authors state that if offshore outsourcing is the consequence of a long-run cooperation with the vendor, it can become a kind of internationalization mode. In this case, the clients do not only perform their activities through a vendor, but do also gain access to new markets (The Economist, 2013). Moreover, Lakhiri & Kedia (2011) suppose that through long-run cooperation, both the client and the vendor coevolve through development of the mechanism of coordination of collateral actions, collaboration and technology transfer.

However, while making a decision to offshore outsourcing, companies take on certain risks. Brandau and Hoffjan (2010:73), for example, name such risks and obstacles as *“poor service quality and communication infrastructure, loss of control, cultural differences, high-employee turnover at vendor firms, the staffing of projects with inexperienced employees by the vendor, as well as country risk, legal, and privacy issues”*. Moreover, Nakatsu & Iacovou (2009:57) suppose that half of the outsourcing projects do not succeed due to erroneous communication systems that do not provide adequate and transparent information exchange; difficulties in overcoming cultural and organizational barriers; lack of understanding of the project risks, and *“middle-management resistance”*.

Studying the differences between domestic and offshore outsourcing projects in the IT industry, Nakatsu & Iacovou (2009:64) define a number of unique risks that are particular to offshore outsourcing. Thus, the authors state that companies, which make a decision to offshore their outsourcing can face such risks as barriers in the interpretation of the information, due to language differences; cultural differences; challenges connected to time differences; differences in contract law systems; changes in the political situation in the vendor’s country; fluctuations in the currency exchange rates; and possible negative impacts on the image of the company connected with the choice of the vendor. Besides, Mukherjee et al. (2013) name some additional challenges in conducting offshore outsourcing such as geographical distance, possible cooperation with local authorities and society, different infrastructure, necessity in managerial methods exchange, and dependence of the value creating processes on the vendor.



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Discussing the position that outsourcing has on the classical hierarchy and market continuum has, Rossignoli & Ricciardi (2015) show that it must be located in the middle together with various other hybrid coordination forms. The reasons for this position are, that companies, which engage in outsourcing activities, are able to profit both from low coordination costs and low production costs. Low coordination costs can be achieved through the hierarchy of the outsourcing provider. It is much simpler and more efficient to coordinate activities within one single company where it is clear who can give orders and who should perform certain activities, than in a relationship where two organizations have similar power and need to coordinate activities in conjunction. Moreover, the relationship to the outsourcing provider is clarified through a written contract that specifies the responsibilities of each party in the inter-organizational relationship, thus reducing coordination costs. Low production costs can be derived from the fact that the outsourcing provider is specialized on the specific activity that is to be outsourced. Therefore, it is likely that it has more knowledge on the activity and can thus perform the activity, faster, cheaper and better than the client.

#### 2.5. Summary

The theoretical framework described the main concepts, the context and the setting in more detail. Thus, it was suggested that accounting information consists of both financial and non-financial information and is seen as the language of business that is communicated throughout the organization and across the organizational borders towards other users. One of the main qualitative characteristics that financial accounting information has to possess is the usefulness for decision-making of the final user, if there should be any relevance for this kind of information at all.

Being the language of the business, accounting has several functions (or roles – the terms are used simultaneously throughout the literature) that it can fulfill in order to be useful for the rational decision maker. Hence, it was shown that accounting can be used to solve conflicts, legitimize organizations, influence the power structure of the

### Theoretical Framework

business, delegate responsibilities and evaluate performance, and it can be used to both form and understand myths from the environment.

In an inter-organizational context, Caglio & Ditillo (2012) have proposed a framework that the authors will use for the analysis of the roles of accounting within the setting of a multinational offshore outsourcing provider. Thus, it was suggested that accounting in this setting has an integrative role, an informative role and a decision-making role. The context of a network that is engaged in offshore outsourcing makes the analysis exciting as the business is characterized by a turbulent environment in which accounting could provide the necessary stability to build up trust among the different entities and to make the network more agile.

### 3. Methodology

*“The method of science is tried and true. It is not perfect, it's just the best we have.  
And to abandon it, with its skeptical protocols, is the pathway to a dark age.”*

*Carl Sagan*

In this chapter of the master thesis we will raise the issues connected to the philosophical position and research approach, research design, data collection and data analysis processes, validity and reliability of the research, methodological research limitations and ethical considerations.

#### 3.1. Philosophical position and research approach

While making a research in the management field the question about the necessity of the philosophy and understanding of its issues can appear. However, Easterby-Smith et al. (2012) defines at least three reasons why it is important. Thus, understanding of the philosophical issues assists in the design of the research (in particular how and which data to collect and how to interpret it in order to answer initial research questions), in the recognition of research limitations while implementing particular research design, and in the adoption of particular research design to the restrictions of the studied subjects.

The starting point in the identification of the philosophical position should refer to the issues of the ontology and epistemology. In turn, ontology refers to the understanding of “*what reality is*” and epistemology relates to “*what can be accepted as real*” (Hart, 1998:51). Traditionally, there are recognized four main ontologies, namely realism, internal realism, relativism and nominalism. The differences between the ontologies regarding the truth and facts perceptions defined by Easterby-Smith et al. (2012) are presented in the Table 3-1.

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### Methodology

<b>Ontology</b>	<b>Realism</b>	<b>Internal Realism</b>	<b>Relativism</b>	<b>Nominalism</b>
<b>Truth</b>	Single truth	Truth exists, but it is obscure	There are many “truths”	There is no truth
<b>Facts</b>	Facts exist and can be revealed	Facts are concrete, but cannot be accessed directly	Facts depend on viewpoint of observer	Facts are human creations

Table 3-1: Four different ontologies

[Source: Easterby-Smith et al. (2012:19)]

Taking into consideration that accounting is contingent and dependent on the context by its nature (Zambon & Zan, 2000), it was decided to refer to the relativism ontology that there is no universal truth and the reality is created by people (Easterby-Smith et al., 2012).

When it comes to the choice of the epistemology, the authors take on a social-constructivist view, assuming that people construct reality and are able to give meaning to it. According to Easterby-Smith et al. (2012), the idea of this approach focuses on the ways to explain how “*people make sense of the world*” (2012:23), mainly by communicating experiences through language with the others. The main peculiarities of social constructivism are presented in the Table 3-2.

<b>The observer</b>	Is part of what is being observed
<b>Human interests</b>	Are the main drivers of the science
<b>Explanations</b>	Aim to increase general understanding of the situation
<b>Research progress through</b>	Gathering rich data from which ideas are induced
<b>Concepts</b>	Should incorporate stakeholder perspectives
<b>Units of analysis</b>	May include the complexity of ‘whole’ situation
<b>Generalization through</b>	Theoretical abstraction
<b>Sampling requires</b>	Small number of cases chosen for specific reasons

Table 3-2: Implications of social constructionism

[Source: Easterby-Smith et al., 2012:24]

Based on the social-constructivist view, it makes further sense to analyze the collected data on a qualitative basis. According to Frankfort-Nachmias & Nachmias (1996), using a qualitative research approach makes it possible for the researcher to “*understand behavior and institutions by getting to know the persons involved*” (1996:281). Besides, qualitative research fits better than quantitative one, since while conducting a qualitative research a “*researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting*” (Creswell, 1998:15). It gives a better understanding of the insights of the studied processes by provision of data that is expressed through words and based on personal perceptions and understandings. (Easterby-Smith et. al, 2012)

### 3.2. Research Design

Otley & Berry (1994 from Kartalis & Athianos (2009)) insisted that there is a need to study accounting through the case study research design, as the latter will give different from quantitative studies contributions. Moreover, since Caglio & Ditillo (2012) state that there is a lack of knowledge in the area of functions of accounting in inter-organizational setting, Yin (1994) suggests that case study fits better for the explorative phase, as it can not be deployed in order to describe phenomenon or test hypothesis. In turn, case study is “*a research design that focuses in depth on one or small number of organizations, events or individuals, generally over time*” (Easterby-Smith et al., 2012:339).

In turn, Yin (1994:38) classifies case study designs into four main groups, namely “*single case (holistic) design, single case (embedded) design, multiple case (holistic) design, multiple case (embedded) design*”. The differences between the aforementioned types of the case study designs refer to the number of situations studied (single or multiple) and the number of the units of analysis (holistic with a single unit and embedded with multiple units). The focal point of the particular research refers to the deployment of accounting (single unit of analysis) in the network of the company that is engaged into offshore outsourcing (single case). Thus, single-case (holistic) research design is used for the purposes of the particular master thesis.

The single-case studies can be represented through three main rationales, namely extreme and unique case, revelatory case and critical case (Yin 1994). The first rationale refers to the exclusive and rare occasions that happen in the usual environments and that are worth of studying. The revelatory case, in turn, refers to the situations when research uncovers the phenomenon that was not possible to study earlier. The last rationale, namely, critical case refers to the situation when study tests predefined theoretical issues and adds to the knowledge in a particular area. In the case of the current research, Caglio & Ditillo's (2012) roles of accounting are deployed as a framework to analyze how accounting is used in the inter-organizational relations. Since the authors find the limitations of the aforementioned framework and add new insights into it, it is possible to say that the research is organized as a critical case study.

The particular case study was conducted in accordance to Eisenhardt's (1989) eight steps of case study research. Thus, in the beginning the research question was formulated. Then, the theoretical framework was developed and the case was selected. Thus, the authors study the case of Miratech and its relations with clients and internal units. Then, the data collection methods were chosen (discussed further in the section). Afterwards, the data was collected and analyzed. It was supposed that data would be analyzed by means of using both data received from the interviews as well as internal documentation of the company and publications of the company and about the company in different sources. Then, the suggestions on what role does the accounting play in the relations between the companies that are engaged to the offshore outsourcing were developed and compared to the similar and conflicting literature. Finally, conclusions were formulated. Thus, the case study research process can be summarized in the Figure 3-1.

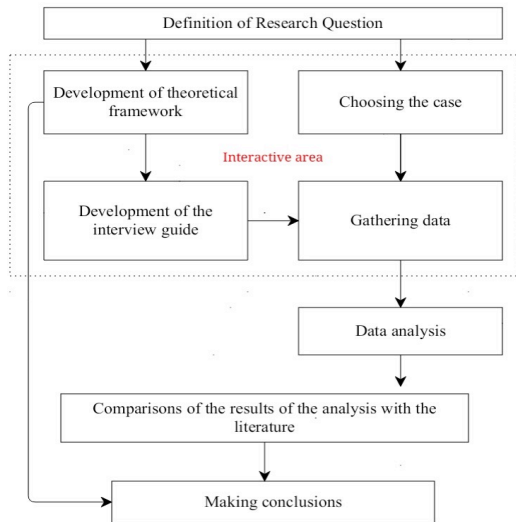


Figure 3-1: Case study research process

However, although case studies reveal the insights of the studied phenomena in particular contexts, they are still criticized in the literature. The results obtained in the course of the research cannot be generalized as well as the interpretation of received data is hardly dependent on the personal perception of the researcher (Easterby-Smith et al., 2012). Besides, it is difficult to analyze all the received data due to its considerable volume, as well as the result of such studies are often ended up in “*massive, unreadable documents*” (Yin, 1994:11). Moreover, it is difficult to decide on whether research was good or not.

### 3.3. Research Design Dilemmas

Conducting a management research, researchers usually face a number of dilemmas that appear irrespectively to the ontology or epistemology of the research (Easterby-Smith et al, 2012). Some of these dilemmas will be discussed further in the context of the particular project.

#### 1. Identifying the unit of analysis

The main dilemmas in this area referred to the choice of the entity as well as to the number of the entities that should be studied. Case study research is “*an inquiry that focuses on describing, understanding, predicting, and/or controlling the individual (i.e., process, animal, person, household, organization, group, industry, culture, or nationality)*” (Woodside, 2010:1). Besides, Woodside (2010) intends that in-depth

case study of one “individual” gives a greater insight and more considerable results than studying of several subjects in the shorter period of time. Thus, we suppose that it is more appropriate to concentrate on one subject of research, namely deployment of accounting. However, when it comes to the object of the research, the network company Miratech was chosen. The main reason of such choice is involvement of the company into two main types of offshoring outsourcing, in particular, the ones with the equity rights and the contractual temporary relations. More detailed information about the company is presented in the in the following chapter about empirical findings.

#### *2. Universal theory or local knowledge*

Every research is aimed to make some contribution to the theory that will be generalized afterwards. The case study research design will give an ability to find out the functions of accounting in the context of inter-organizational relations, in particular, in relations between clients and vendors within offshore outsourcing network. As a result, the authors will attempt to generalize the findings by means of the Caglio & Ditillo (2012) framework.

#### *3. Theory or data first*

While conducting case study research, it is supposed that some data has to be gathered before starting a research (Easterby-Smith et al., 2012) in order to indicate the problematic areas that could be studied. However, first, the authors made some research in the current management accounting literature on the research, and afterwards contacted the company. But since “*the relationship between theory and data needs to be an interactive process*” (Easterby-Smith et al., 2012:66), theoretical framework was constantly adjusted in accordance to the gathered data.

### **3.4. Data Collection and Analysis**

In order to collect the information that is necessary in order to explore the aforementioned research question, interviewing was used as the primary data collection method. An interview as such can be understood as a qualitative data



collection method that is conducted to “*gain insights into social and organizational realities... through discovering the views, perceptions and opinions of both individuals and groups through the language they use*” (Easterby-Smith et. al, 2012:126). Deployment of such a method gives a number of advantages, including the opportunity to clarify obtained information. In addition to that, it gives the ability to observe reactions and emotions of interviewees while providing accurate information.

It was decided by the authors to conduct in-depth semi-structured interviews with the producers of accounting (accountants and managers) and accounting users within the company (please, find the Interview Guide in Appendix A). It was supposed that such a choice of the interviewees would help to shed some light into how the perception of producers of the accounting information regarding the usage of accounting corresponds to the real deployment of accounting. Initially, it was planned to conduct 2-3 interviews in with the operational headquarters, legal headquarters, and representative office of the Miratech as well as one interview with 2-3 clients in order to receive sufficient data, in order to make the findings reliable.

However, a number of challenges appeared during the data collection process. The initial contact was established with the manager of the representative office of Miratech in Norway. It became impossible to arrange the interviews with the legal headquarters due to the long-term travel of the preparers of accounting information. Later, it was agreed to make interview with the operational headquarters in Kyiv. However, at the last minute the later have canceled the arrangement without any explanation of the reasons. Nevertheless, through some informal conversations it became clear that the potential interviewees were afraid of giving answers to some of the questions.

Such a situation can be possibly explained by the cultural differences. Ukrainians are known to be the nation with the high power distance and uncertainty avoidance indexes by the Hofstede taxonomy. In turn, the high power distance index indicates that the distance between managers and regular employees is extensive, the relations have very formal character, the decisions are done mostly by the higher levels of the organizational hierarchy, as well as most of the actions should be conformed by the boss. In Ukraine this index is 92, when in Norway it is only 31. Uncertainty

avoidance index (95 in Ukraine, 50 in Norway) relates to how people deal with the unpredicted situations. The high index of uncertainty avoidance of Ukrainians tells about their distance and formality when it comes to the relations with strangers, as well as their wish to stay away from unusual for them circumstances (The Hofstede Center, 2015).

However, the manager of the Norwegian representative office kindly agreed to be our interviewee. His deep knowledge of the company's activities and operations gave us a possibility to receive the answers for the questions that were planned to be asked for both representative office and headquarters. Thus, three in-depth semi-structured interviews were conducted in March and April. That way, the manager had more opportunities to talk freely about his experiences on the preparation or usage of accounting information. Moreover, it has the advantage that aspects can be covered that the authors did not think of beforehand. However, Easterby-Smith (2012) give the advice that the standardization of the interviews is lower than in highly structured interviews, resulting in potential difficulties during the analysis.

Due to the time and cost constraints, the interviews were conducted via telephone. All three interviews were conducted in English. According to Easterby-Smith (2012), telephone interviews have several advantages, including the fact that the interviews can be more easily rescheduled and that the managers feel less committed to host the researcher. In addition to interviews, it was also sensible to collect data from secondary sources, such as documents. Documents included the brief annual reports of the company presented on the official web-cite. Besides, the information about the company from the media resources was also taken into consideration.

However, it was obvious that the research based on three interviews will have a very limited degree of validity and reliability. That is why it was made a decision to make an extended literature review on the topic of roles/functions of accounting in the academia literature in order to enhance the support of the facts presented in the analysis. Thus, while conducting the findings, two databases have been searched, namely Elsevier Science Direct and Proquest. Due to the fact that the topic of the roles of accounting is a relatively new aspect within the accounting literature, the amount of published articles is limited and it was therefore decided not to limit the

search by publication year. Moreover, the initial search for articles that discussed the roles of accounting in an inter-organizational setting returned almost no results and it was therefore decided that it would make more sense to include articles that discuss the roles of accounting in any setting. It was however obvious that the publications must include the phrase “functions of accounting” or “role of accounting” in the title. Within the database Elsevier Science Direct, which offers a larger possibility for advanced search, the articles could include these phrases also in the abstract or in the keywords. The search for “the role of accounting” resulted in a total of 153 published articles in the database Proquest and 152 in the database Science Direct. The second search for the functions of accounting resulted in just 4 articles in the database Proquest and 13 articles in Science Direct. Unfortunately, not every article was freely available and it was necessary to apply judgment on the relevance of certain articles for the actual topic. This was especially true for the database Science Direct, where many of the articles were not in topic. After sorting out the relevance of the articles for the research topic, a total of 65 articles remained as findings (Please, find information about the articles in the Appendix C).

Once the data from the interviews was received, it was transcribed and written down. Afterwards, it was sent to the interviewee for verification. Thereupon, it was structured regarding to the roles of accounting in the inter-organizational relations (within the company and with the customers) in accordance with the Caglio & Ditillo (2012) framework described in the second chapter of the current master thesis. However, in order to clarify some of the data gathered within the first and second interviews (from the point of view of headquarters and representative office), the necessity of conduction of one more interview appeared. The data received from the analysis of the literature was divided in accordance to the different roles detected. Finally, the data received from the case was compared to the one received from the literature.

#### 3.5. Validity and Reliability

Healy & Perry (2000) show that in constructionist research designs it is believed that there is more than one truth, which is constructed through the opinions of different minds, thus highlighting the fact that qualitative research has not the goal of finding the truth. Therefore, it is suggested that in comparison to positivistic research designs the quality is not evaluated according to the criteria internal validity, reliability, and external validity. Instead it should be more focused on credibility, neutrality and transferability of the study as indicators for quality. This is also proposed by Easterby-Smith et al. (2012:53), who show that the validity of constructivist research can be tested through three main criteria namely authenticity, plausibility and criticality. Thus, authenticity refers to the understanding that the authors show in terms of the studied phenomenon in the investigated organization. Plausibility demands the researcher to prove some relevance of the study to the current ongoing research interest in the research world. Finally, criticality demands the researchers to critically question assumptions of other researchers and therefore provide some new ideas and novel solutions to the research field.

In terms of the authenticity, it should be mentioned that the study includes a structured literature review of the field of the roles of accounting that outlines in a transparent manner how the data was received. Moreover, the authors believe that the introduction to the thesis and the theoretical framework show a deep understanding of the field that has been analyzed in the following sections of the thesis.

With respect to the plausibility it is rather obvious that there is a lack of knowledge in the field of the usage of accounting information in the inter-organizational relationships of networks. Researchers have started to analyze this field only from 2004 onwards and during the course of the study, the authors did not find one article that discussed the roles of accounting in the inter-organizational relationships of an offshore outsourcing provider. Thus, it is believed that the study provides unique insights into the research area.

Criticality is rather difficult to prove, however the authors believe that the analysis of a previously suggested framework in the research area shows the endeavor to critically

analyze if the findings are applicable to different setting or not. Hence, it is believed that the study shows all three criteria for the validity of the research design and is therefore of sufficient quality.

However, the fact that the access to the empirical case was extremely limited reduces the reliability of the study significantly. Within constructionist studies the “truth” should be constructed through the opinion of several individuals with different mindsets. This was not exactly the case in this master thesis, where the empirical data was on the one hand side conducted from just one manager of the company Miratech. On the other hand side, the authors did not conduct just one interview with this manager but three interviews. In the end of the second and third interview the answers kept overlapping with previous answers and it is believed that insights from other managers of the company would not add very much information to the one that was already received from the three interviews. Moreover, the authors decided to make a structured literature review of the topic to increase the reliability of the study. Thus, it is proposed that while the findings that have been conducted in very specialized area of research (offshore outsourcing) are certainly not transferrable to other industries or generalizable in general (which is usually the goal for more positivist studies), it does add valuable and reliable insights into the research area.

### **3.6. Methodological Research Limitations**

The decision to write a paper in a social-constructionist view has some inevitable issues for the research that are limiting the authenticity, plausibility and criticality of the paper. According to Easterby-Smith et al. (2012), these limiting factors include the fact that the data collection can take a very long time, compared to studies that are written from a positivistic point of view. Moreover, it is much more difficult for the researcher to interpret the data that has been received through e.g. interviews and the researcher has to have some “*intimate, tacit-knowledge*” (2012:28). Qualitative papers are, therefore, often criticized for being object to subjectivity of the researcher.

Concerning the decision to use interviews as main method for the collection of data in qualitative reports, it is also of importance to take into consideration that much of the success of this method depends on the ability to build up trust during the interview and possessing the appropriate interviewing skills. Especially, while interviewing top managers who are professional in giving interviews, it might be difficult to receive the necessary amount of relevant information. Besides, it has to be noted that interviewing can entail some information distortion, due to the possibility of personal perception by the interviewee concerning the examined phenomena. These perceptions can be different from the reality or particular expectations of the researcher that are based on the prearranged theoretical investigations (Appainach et al., 2010; Frankfort-Nachmias & Nachmias, 2009).

#### **3.7. Ethical Considerations**

Conducting a research, most of the researchers usually face some ethical issues. Thus, while handling the particular research the authors faced some of such issues as well. In particular, they referred to the private interests of the company studied, as well as the information received from the interviewee. In turn, since it was planned to tape the interviews during the data collection, in order to have more control over the interviews and more detailed data for the analysis, the authors were aware of the fact that confidentiality is highly important. However, the manager did not request any confidentiality. The authors accept that the managers hold any rights concerning the content of the recordings and do not intent to publish information that was obtained within the interviews anywhere outside of this research. However, by the ask of the manager of Miratech, the interviews or any other conversations with the customers of the company were not arranged in order not to affect their relations.

Another important ethical aspect of the conducting a research refers to the respect of the research community. In turn, plagiarism is considered as unacceptable and disreputable action. Thus, all the citations or ideas from the literature are referenced in accordance to Harvard referencing system. Besides, it is worth to mention that while

performing the literature review a case of plagiarism was detected. One of the Asian journals has published an article that contained extensive copies of the original text of the article by Kothari & Lester (2012) “*The role of accounting in the financial crisis: Lessons for the future*” published in *Accounting Horizons*, [26:2], 335-351. The authors of the article were informed about the case in order for them to take appropriate measures and prevent such cases in general in future.

#### 3.8. Summary

Within this methodological chapter it was shown that the authors adopt a constructionist view on the topic of accounting use. Thus it was proposed to conduct a critical single case study. While defining the research design, the authors faced such dilemmas as identifying the unit of analysis, the choice between universal theory or local knowledge, and a decision on whether data or the theoretical framework should go first. In order to construct the case study it was decided to collect data by means of in-depth semi-structured interview. However, due to the challenges with the access to the interviewees and, therefore, limited primary data, it became necessary to increase the reliability of the findings additionally through the conduction of a structured literature review.

Besides, the methodological limitations of the research design and the data collection methods were outlined, such as subjectivism of the research design as well as possible information distortion during telephone interviews. Furthermore, the ethical considerations regarding the private interests of both individuals and the company were taken into consideration. That is why the interviews with the clients of Miratech were not conducted in order not to affect the relationships. The quality of the study has been shown to be both valid and reliable through triangulation of the data received from interviews, the company’s documents and the findings from a thorough literature review.

## **4. Empirical Findings**

Within the following part of this thesis, the authors will present the findings that were conducted during the research of the topic of the roles of accounting. The findings include both primary data that was conducted during interviews with a manager of a multinational offshore outsourcing company. The findings that were derived from the primary data are used to build up the case for analysis later on. However, due to the fact that the primary data includes information from just one manager of the company, it was decided that secondary data from a structured literature review could help to increase the validity of the study. Thus, the findings that have been derived from this review will be presented afterwards.

### **4.1. Findings from primary sources – The case of Miratech**

The findings that were derived from three interviews with the manager of the local subsidiary of Miratech in Norway are structured in the following way. First, the case will be introduced, outlining the main services that the company provides. Then, the different relationships in the network are outlined and the flow of accounting information will be described, giving valuable insights into the way accounting is used in the inter-organizational relationships within the organizational boundaries and in the relationships with the clients of the company.

#### **4.1.1. Introduction to the empirical case**

Miratech was founded in 1989 by a team of specialists from Glushkov Institute of Cybernetics in Ukraine. Today it is a provider of IT outsourcing with corporate headquarters in Stockholm, Sweden and Washington, DC, USA. The company has six research and development centers in Poland, Slovakia and Ukraine.



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### Empirical Findings

The main services that are provided by Miratech include:

#### *IT infrastructure management*

The company provides services on full operation of the IT department for different enterprises. Such services allow firms to decrease costs on IT department support and to concentrate themselves on their main activities. The company also provides Value Added Services, including IT infrastructure optimization and hosting of equipment.

#### *Outsourcing services*

Miratech provides consultants and engineering groups, who specialize mainly in insurance, telecommunication, banking, etc.

#### *Business solutions*

The company develops and implements different program solutions, which take into account the specific character of the clients' activities. In addition to that, Miratech provides assistance in Customer Relationship Management, Contact Centers, Enterprise Content Management, etc. to clients that are located mainly in the countries of former Soviet Union, Europe and North America. The diverse nature of the services that are provided by Miratech and the widespread offers to several continents of the planet explain why among the clients and partners of Miratech it is possible to find many multinational world-known companies, including: the OTP Bank Plc., Samsung Electronics, the Swedbank, Siemens, Philips & Co., IBM, Hewlett Packard, and many more.

The average annual growth of Miratech's assets is around 20%. According to the managers of the company, a high level of competence and great experience could explain this kind of success in IT business and therefore it composes the base of the company's strategy. Moreover, the strategy of the company is directed towards four main areas, namely customer focus, quality service, partnership and knowledge and skills.

#### *Customer focus*

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The main goal of the company is client satisfaction. Satisfied clients give the company an ability to hire best specialists, carry out regular trainings and receive stable profit.

#### *Quality service*

Serving each client, the company's employees guarantee the highest quality of service. Such quality is provided by a non-stop controlling process, which includes the validation and verification by engineers, who check the software after each stage of service development. In case of a mistake, they start to study all the processes from the beginning. This process is conducted in collaboration with the developer, assuring that the final intellectual product is free from mistakes.

#### *Partnership*

For the last few years, Miratech strengthened its position on the market. In addition to the fact that it widened cooperation and agreed on future projects with such companies as Migdal, VTB Bank, and Ukrazalznitsya, the company's business in the European and American markets increased by 58% during the year 2014 (Miratech, 2014). Due to the fact that it is of crucial importance for the company to increase its market share on the international market, Miratech opened additional operational subsidiaries in Switzerland and Great Britain in 2011.

#### *Knowledge and skills*

As of the beginning of the year 2015, Miratech employed 870 people. In order to ensure the highest quality of their services, the company hires the best specialists, since employees are the main and the most valuable asset of the company. The services that are provided are an intellectual product, where people cannot be substituted as opposed to companies that derive their income from fixed programs, product lines or real estate that offer a possibility for a higher rate of employee turnover.

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## Empirical Findings

### 4.1.2. Inter-organizational relationships in the network of Miratech

The inter-organizational relationships between the customers of Miratech and the company, as well as the intra-organizational relationships between the different entities of Miratech can be best described as a network in which specifically the term “offshore outsourcing” plays a significant role. As it was described within the theoretical framework in the thesis, outsourcing occurs when goods or services are obtained by contract from an outside supplier. The special issue about offshore outsourcing is that it occurs on an international level, i.e. that services are outsourced to a provider that is not located in the same country as the company that wants to obtain the services. This is exactly the case in the company Miratech, where on the one hand side, clients outsource their activities to the local subsidiaries of Miratech. On the other hand side, these local subsidiaries of Miratech insource services from an international network of research centers that are mainly located in Eastern European countries.

Obviously, while the clients can profit from a highly specialized organization with deep knowledge in different areas of the business that is able to provide high quality services to low prices, Miratech needs a certain degree of cooperation from the clients. Especially for the areas that involve business process reengineering, it is of importance for the employees of Miratech to gain access to the client’s business processes so that they can be analyzed and solutions for improvement can be identified and implemented. Indeed, it might be necessary for Miratech’s consultants to physically enter the facilities of the client, in order to come up with suitable solutions and work efficiently in conjunction with the employees of the client. Moreover, it is of high importance for the managers of the client and managers of Miratech to stay in constant contact to each other. This reduces the risk of failures and solutions can be better adapted to the client’s expectations.

Within the company itself, Miratech has to communicate and coordinate activities between different entities. While most of the communication between the company and the clients happens through the local subsidiaries in the country of the client, the

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central steering responsibility of the organization is located in the different headquarters of the US and Sweden. The communication within the company does therefore concern mostly financial matters (e.g. budgets and targets, as will be discussed later), but there can be non-financial communication concerning questions about the clients and help for solutions as well. This is especially true for the communication with the research centers that are responsible for the development of special solutions.

#### **4.1.3. Flow of accounting information in the network of Miratech**

As it follows from the preceding introduction to the case, Miratech has a quite complex organizational structure with international inter-organizational relationships that can be defined as network. According to the country manager of the local Miratech subsidiary in Norway, the company is strongly centralized with two headquarters in Sweden and the USA, different local subsidiaries, as well as research centers. This structure has naturally a very large influence on the roles that accounting has within the company.

While the company has many local subsidiaries in different countries, which provide outsourcing services to both local and international customers all over the world, the central accounting function is located in the Swedish headquarters (respectively in the US headquarters, which is responsible for the accounting of the operations of the Northern American continent). The local subsidiaries are however in close contact with the customers. Therefore, they do communicate certain information with the customers, especially when it comes to specifications that relate directly to projects. According to the manager of the Norwegian subsidiary, the subsidiaries have different levels of reporting with the customers. The first level is progress and project reports that include, for instance, milestones that have been reached since the previous reporting period. Both types of reports are sent to the customers in the form of excel sheets and on a weekly basis. The second level are face-to-face meetings with the project managers, which can be slightly less formal than the third level, which includes meetings between the project owner and one or more representatives of the

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central management team of Miratech. While the meetings on the third level are performed in a rather formal way, the manager stated that meetings on the management level do not include formal procedures like taking minutes.

Offshore outsourcing includes a fair amount of trust by the client and the risk that clients might switch to competitors is fairly high, especially when it comes to relationships with new clients. According to the local manager in Norway, there are different types of clients based on the type of service that is outsourced. Since it is suggested by the manager that third parties can perform less central functions “faster, cheaper and better”, the issue of trust is, on the one hand, not of great relevance for clients that outsource non-core activities. On the other hand, clients that aim at outsourcing activities that are central to their business have certainly a much bigger concern towards trust and might experience a certain loss of control over their business during the process. It is, however, suggested that such cases are fairly rare and clients do in general understand the risks that are associated with outsourcing. Therefore, the issue of trust is usually not of great concern to Miratech.

Much more important is the building of long-term relationships. In order to keep the client, it is of crucial importance to keep the clients as well informed, as it is possible. In addition to the information that is communicated with the customers through these three levels, there is also informal communication with the customers. The clients are informed weekly through the previous mentioned reports and additional information might be communicated in cases of clarifications in between the reporting periods. Of course, it is beneficial to keep customers over a long-term period. Therefore, it was proposed that clients are additionally informed in an informal way over the phone. Once a long-term relationship is established, formal communication becomes of less relevance and shortcuts can be created to solve simple conflicts fast. Informal communication also gives the customers additional opportunities to speak up during the outsourcing process and give additional instructions that might have been left out in earlier discussions. The manager pointed further out that this would be one of the main differences between an outsourcing provider in Europe compared to the competition from India, where they are much more rigid in terms of use of resources

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and specifications that have been agreed upon in the beginning. European outsourcers are supposed to be more flexible and more solution-oriented.

Besides the fact that accounting information is communicated to build up trust and relationships with the customers, it can also be used in conflicts. The manager of the Norwegian subsidiary pointed out that while Miratech does not like to use such information in conflicts, it is a possibility and it can certainly be helpful in solving them. Most information that is relevant for the relationship with the client is being recorded and accounted for in some form and can therefore be used to clarify disputes fast and simple.

The company uses inter-organizational cost management techniques to stay in closer contact with the clients. This is mainly due to the fact that Miratech needs to have insights into the client's business processes. Most clients of the company want to improve their activity-based costing with regard to the processes within the company. Therefore, the inter-organizational activity-based costing that Miratech uses is mostly concerned with business process reengineering. Here, the processes of the client are analyzed and solutions for improvement can be developed and implemented. However, this does not include an analysis of the full financial position of the client and it was clearly commented that inter-organizational cost management techniques like open-book accounting would not be used. Details like the scope, the timeframe when projects have to be delivered, as well as possible milestones and the height and method of the payment are usually agreed upon before the beginning of the project. Such information is supposed to be the only financial information that a service provider needs. Over and above, it was stated that open-book accounting techniques would provide absolutely no additional benefit to the partnership between Miratech and its clients. Neither does Miratech need information about the financial position of the client, including information about purchase prices, etc., nor do the customers need such information from Miratech.

Interestingly, since the subsidiary does not have any accounting function it can also not report any financial data to the headquarters. Due to the central organization of the company, the subsidiary receives financial reports from the headquarters, where the accounts of each entity of the company are being prepared. Afterwards, the managers

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from the headquarters are then sending the financial reports back to the managers of the local entities, so that they know how well they are performing. Moreover, the headquarters are sending out budgets and targets to the local entities, so that it becomes more clear to the local managers how they have to perform within the following periods.

Besides the local subsidiaries, Miratech manages a number of research centers, which are responsible for the development of solutions. These research centers are subordinated to the operational headquarter that is located in Kiev. However, due to the fact that the company is strongly centralized, these research centers do not have any accounting function as well and the headquarters are thus responsible for them. Moreover, the research centers are no legal entities and are therefore not subject to financial reporting in their country of operation. The headquarters are preparing reports that include budgets and other financial information like the balance sheet and the income statement for the entities and send them to the manager of the local entities. That way, it becomes clear to the local managers if they performed well during the last period and what targets they have to reach within the next one to increase their performance.

During the interviews with the local manager of the subsidiary in Norway, it was further pointed out that there is always non-financial reporting from the side of the subsidiaries and research centers to the headquarters. The information that is reported here includes details on the customer market needs that might be used by the headquarters for strategic decision making in the future. For that purpose, the company also builds up an experience database, which can guide managers in the future to learn from past decisions.

Both the headquarters in Sweden and the headquarters in the USA are legal entities and they are therefore subject to legal reporting to the authorities. Legal reporting includes all financial information that the authorities need to evaluate the tax that will be applicable for the year. Auditors additionally check this financial information and the entity can be held accountable for any mistakes that might have been occurred during the reporting period.

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In addition to the legal reporting, the local headquarters in Sweden and the USA report their financial information to the operational headquarters in Ukraine, where the accounts are consolidated. Based on these accounts, it will then be possible for the managers in Ukraine and the managers in Sweden and the USA to make strategic decisions on the operations in the different local subsidiaries. As the manager of the Norwegian subsidiary pointed it out, Miratech is not a publicly owned business and therefore it is not obliged to report all information to the authorities. A lot of the financial information is also used to construct internal business cases that can guide managers within the company in the decision-making processes and to follow up progress of the projects.

The following illustration shows in a simplified way the accounting flow in the Miratech network.

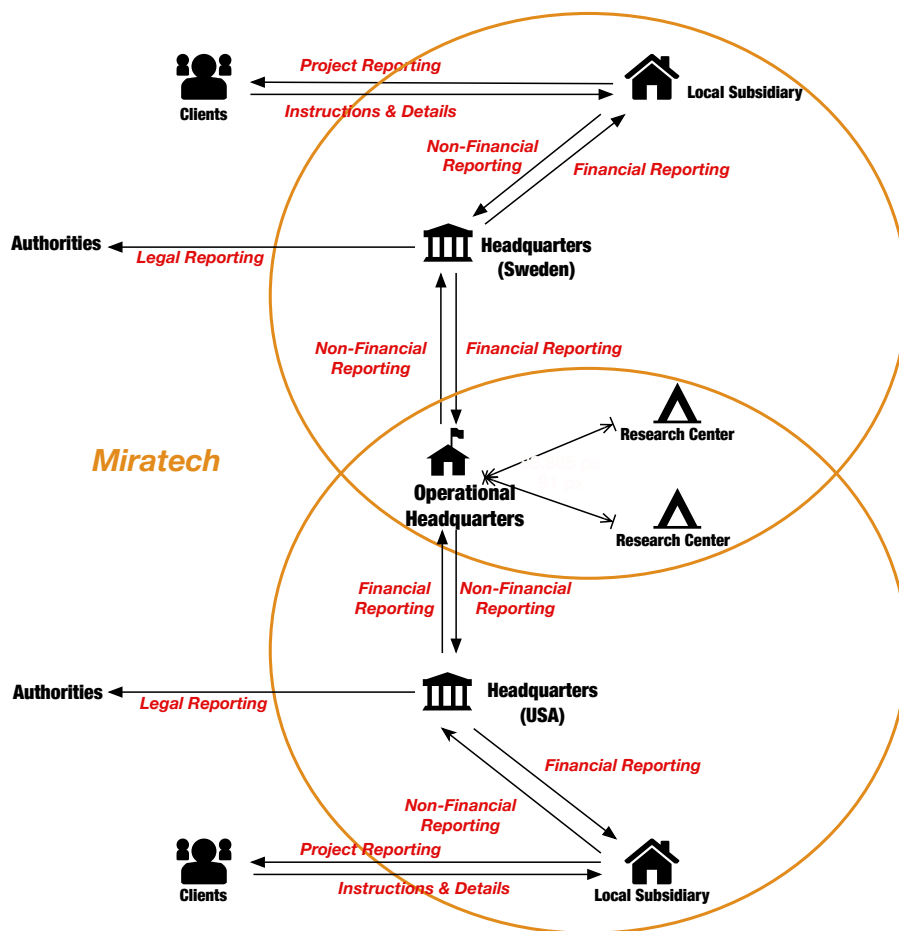


Figure 4-1: Accounting flows in the network of the company Miratech (Own illustration based on interviews)



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Due to the fact that Miratech operates in a very diverse portfolio of countries, it might be expected that there are rather substantial issues concerning the integration of new entities and cultural issues with colleagues from other countries. However, the manager of the Norwegian subsidiary pointed out clearly that such issues do in general not appear. The location of new entities is based on three criteria: 1. Market segmentation, i.e. places where Miratech has already build up references and can therefore be a trustworthy partner to new clients; 2. the relations to key customers, who might have a need for further cooperation in the future; 3. an opportunistic approach, where entities are established because the company found by chance any partners that possess needs which can be covered by Miratech. These criteria are difficult to forecast, increasing the challenge that managers have to face when new entities have to be integrated into the company. However, since there has been cooperation between the entities from different countries already for a long time, the organization has established a quite comprehensive code of conducts that each entity has to comply to. Moreover, the financial data within the company is not translated to the local standards of the countries in which the subsidiaries and research centers are operating. Thus a common language between the entities is created, which might prevent cultural issues across the different countries.

#### **4.2. Findings from secondary sources – A structured literature review**

The following part of the thesis will entail the findings that were conducted from a thorough literature review of the topic of the roles of accounting. It is expected that the findings that can be derived from this literature will significantly increase the knowledge on the roles that accounting has in different contexts. The findings from the review are structured as follows: first, the authors provide a quantitative overview over the sources that have been considered relevant for the study (see also the appendix for a full overview of the sources), next the authors show which roles of accounting have been described in the literature in different contexts. The findings can then be used for the analysis of the functions of accounting in the setting of

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Miratech, where it will be analyzed if any of the roles that have been identified fit to the context.

4.2.1. A quantitative overview of the findings from the literature

The following findings from the literature include predominantly journal articles from scholar and trade journals.

The following illustration shows the distribution of the articles that were included in the authors' findings over the years. The most classical article that was found to be of relevance was written in 1947. However, in the following years the topic did not receive much attention. In the 60s, 70s and 80s, there were on average 3 articles per decade, which discussed the role of accounting. One decade later in the 90s, the interest started to increase with 5 articles and continued increasing with 21 articles between 2000 and 2009. Since then until today, there have been already 29 published articles on the topic, with the climax reaching 9 articles in 2014. However, it must be mentioned that there have been already 4 published works in 2015, indicating a strongly positive trend towards more articles in the future. This finding is somewhat surprising, as it conflicts with the view of Gårseth-Nesbakk & Timoshenko (2014), who expressed their worries that there would be no increase over time in published articles on the topic of the functions of accounting.

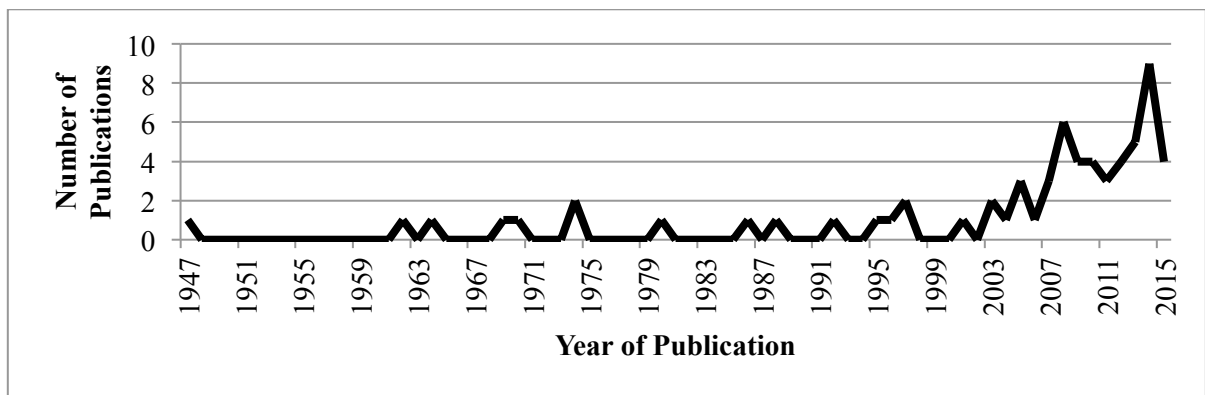


Figure 4-2: The distribution of articles over time (Own illustration)

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Due to the fact that the authors aimed at including articles from as many countries as possible, in order to gain a broad overview of the work in many different countries, there was a very large number of journals from which articles have been included in the findings. In total there were 40 different journals in which articles that were considered relevant have been published. However, in most cases there was just one article from a journal, which showed up in the database search. In a few cases, there were however more than one article and the following illustration shows the journals that were most important to the findings of this master thesis (i.e. journals, which published more than one article of relevance):

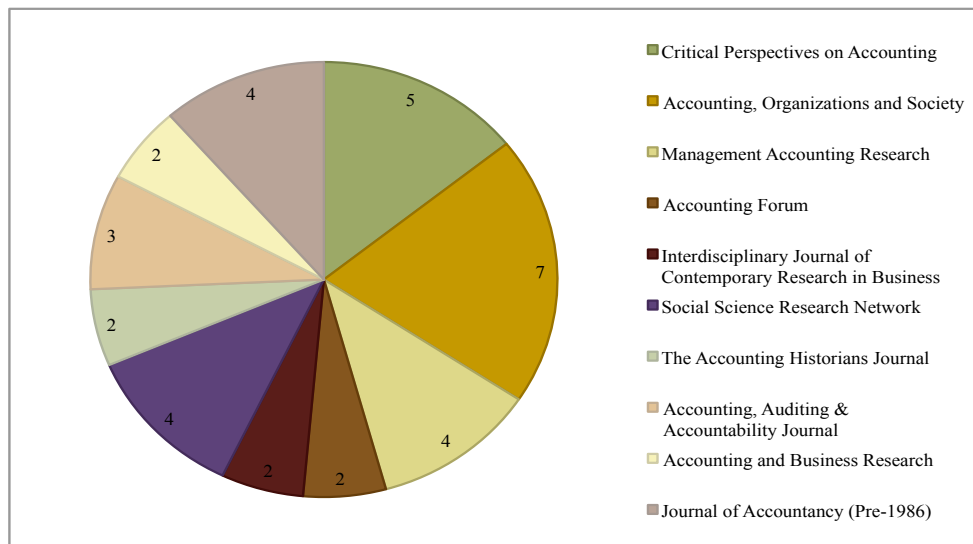


Figure 4-3: Journals with most relevance for the study

(Own illustration)

As indicated before, the articles have been collected without a focus on particular countries. Thus, the findings include articles from all over the world. However, as it becomes inherent from the following illustration, there is a strong concentration of articles that have been published in English-speaking countries. Articles from the US, UK and Australia make up 59% of all findings. Additionally, there are 3 articles from Canada, 2 from New Zealand and 1 from Ireland, thus increasing the percentage of Anglophobic countries to 67%.

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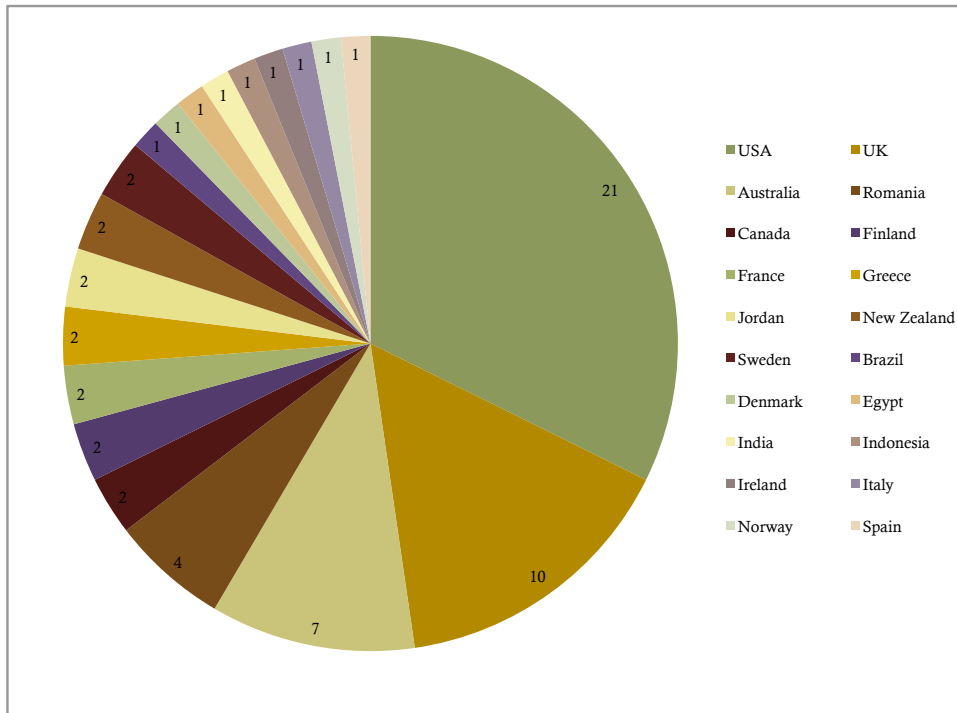


Figure 4-4: Places of origin of the published works

(Own illustration)

Moreover, there appears to be a clear tendency towards male authors in the field. The findings show that male authors have written 62% of the articles, while research teams that consisted of female authors have written only 7%. In 26% of the cases, both male and female authors have conducted the research. Therefore, the role of male researchers appears to be significant in the field, as they are participating in 88% of the relevant articles.

It is apparent that the authors use a wide variety of methodologies. While several authors (e.g. Otley and Berry, 1994) suggest that case studies should be applied to study the field of accounting, this is only partially true for the articles that have been included in the findings. If a methodology is applied then it is in most cases a case study (in total 23, compared to 10 with a quantitative approach and 7 that are based on a literature review). However, there are a similar number of articles (24) that spare a methodology at all and are written in a discussion style. As it is illustrated in the following graph, this trend is consistent over time.

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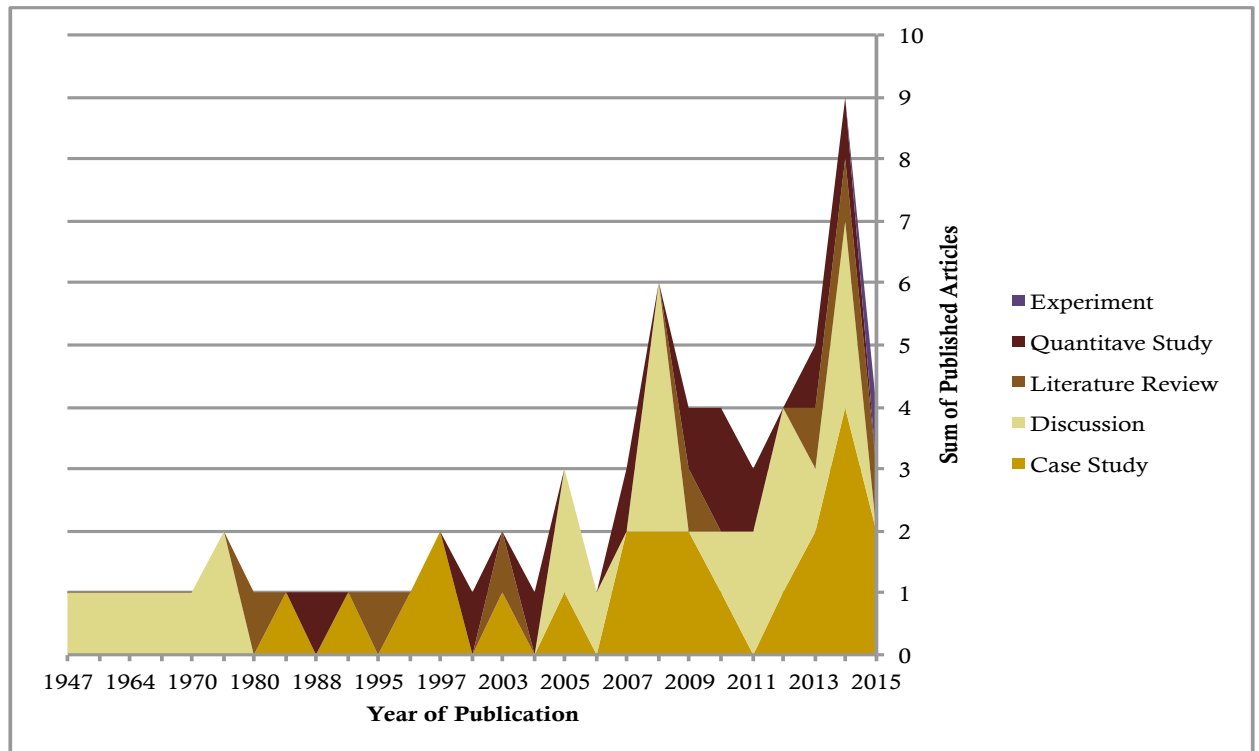


Figure 4-5: Use of different methodologies over time

(Own illustration)

Similarly, the theoretical framework of the articles is widely varying with some articles discussing the roles of accounting in terms of agency theory, institutional theory, or transaction cost economics. However, it is noteworthy that the broadest proportion of the articles (approximately 77%) has no specific theory in their theoretical framework.

As it was pointed out earlier, the initial search for articles in the field of the roles of accounting in an inter-organizational setting did not return a noteworthy number of results. However, while reading through the findings of the roles of accounting as such, it turned out that many of the articles did in fact discuss an inter-organizational setting. The findings show that 30 of the articles discuss the role of accounting in the setting of single firm, 9 articles the role of accounting in an inter-organizational setting, and 15 articles the role of accounting in a public setting. It must however be mentioned that there were also 11 articles where it was not specified which setting was discussed. The findings are summarized in the following illustration.

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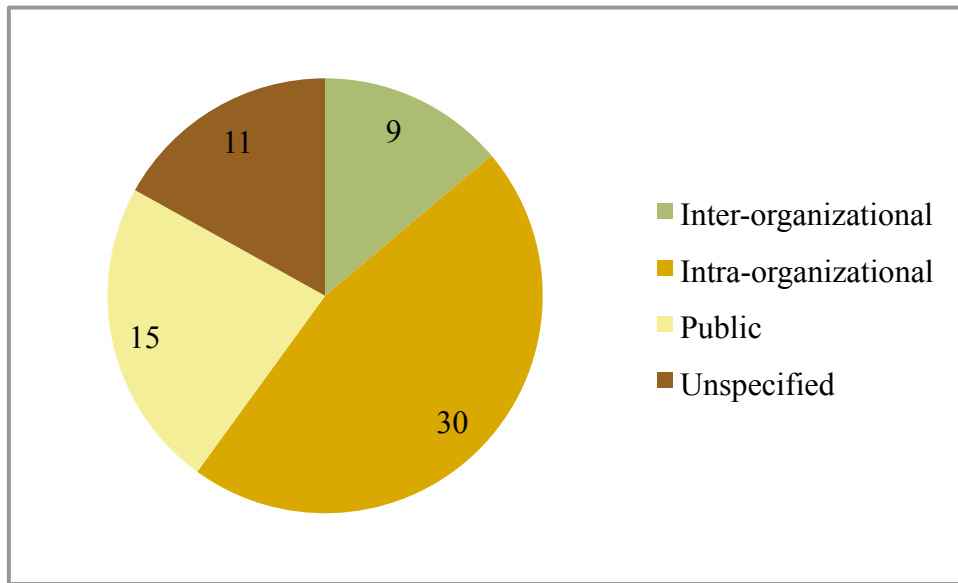


Figure 4-6: Different settings for the roles of accounting  
(Own illustration)

#### 4.2.2. Review of the Findings – Fifteen Shades of Accounting

The roles of accounting in different activities and contexts are widely discussed in the literature. In this particular part of the master thesis the review of the literature on the aforementioned topics will be presented. First, the classification of the accounting functions presented in the literature (besides the ones presented in the theoretical framework) will be reviewed. Then, different roles of accounting found in the literature will be introduced.

##### *Classification of the functions/roles of accounting in the literature*

The first division into the particular functions of accounting that we managed to find in the literature refers to Camman (1947). In turn, the author provides for an overview of the major business areas and aligns these with the functions that accounting can provide for them. In total he provides the functions of accounting for seven major business areas, namely the administration, finance, sales, production, personnel, development, and procurement.

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To start with, Camman suggests that the function of accounting for the administration lies within forecast/budgets and trend summaries that can provide information about where the company wants to and how fast it wants to go, as well as information about where the company is going at the moment and how fast this is happening.

The functions of accounting within the area of finance lie in the provision of financial statements, internal control, and taxes. Financial statements can provide the necessary information about whether the company has sufficient resources to meet its obligations towards all major stakeholders. Internal control can give information about the maintenance of property and insurance against risk. While accounting in the area of taxes helps the company to interpret policy decisions in terms of the effect on tax payments, as well as to determine whether the company pays an appropriate amount of taxes.

Within the area of sales, accounting can support the company with market analysis and price structures. Market analysis gives information about the customers and where products are most likely to be purchased, in which quantity and to what price. Price structures give information on the pricing policy of the company. It becomes inherent whether the current pricing is competitive, where the break-even point is located and whether the company is currently achieving profitable sales.

When it comes to the area of production, accounting has the function of providing data that delivers information on the costs that incurred during the production process. Here, the major question is how expensive the production of the products is and what costs are attributable to the different steps of the production process. Moreover, it is supposed to give information on how it is possible to decrease the costs that incurred. The function of cost reduction is therefore concerned with the questions which costs are too high and how is it possible to reduce the costs. In addition to the functions that accounting has within the classical production process, Camman (1947) provides also functions for the production level that he defines as shop management. Here accounting has the functions of inventory control, labor effectiveness, indirect manufacturing expenses, production control, tool cost control, and plant and equipment.

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In addition to the foregoing areas, the author also marks out the area of personnel, where accounting provides quite naturally the information that is necessary to make judgments on the performance of the staff, as well as to make judgments on the quality and reward of the job from the side of the company. The specific functions that it provides in order to do so, are namely: employee earnings, job evaluation, employee's profit sharing, and security for the employees.

Camman concludes with two more areas namely the area of development engineering and the area of procurement. In the former area, accounting has the function of project control. It is suggested that the company needs mainly information on the workflow the projects, i.e. how the projects are going along and how expensive are they with respect to the budget. It is important for the company to know if projects are more expensive than it was expected, so that it can either allocate more resources to it, or cancel the project before too many costs are incurred. In turn, in the area of procurement accounting provides information for procurement planning. Here, it is suggested that the company needs to know about the requirements for procurements on a quarterly basis for one year ahead. The aforementioned functions of accounting are summarized in table 4-1.

<i>Main areas of management</i>	<i>Accounting function in the main areas of management</i>
Administraion	Forecasts - Budgets Trend Summaries
Finance	Financial Statement Internal Control Taxes
Sales	Market Analysis Price Structure
Production	Cost of Production Cost Reduction
Shop Management (as a part of Production area)	Inventory Control Labor Effectiveness Indirect Manufacturing Expenses Production Control Tool Cost Control Plan and Equipment
Personnel	Employee Earnings



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	Job Evaluation Employee's Profit Sharing Security
Development Engineering	Project Control
Procurement	Procurement Planning

Table 4-1: Functions of accounting in the main areas of management

(Compounded by authors from Camman (1947:29-31))

Nearly twenty years later Fess & Holzer (1964) suggest that it is important to separate two very distinctive functions of accounting. Using the example of direct costing, they explain that accounting is only useful for the user if it has both a “historical” and an “interpretative” function. The authors define the historical function of accounting as factual reports of the activities that have happened in the past. The interpretative function is defined as supplementary information that accompanies the factual data. These two functions are necessary for the user to make sense out of economic events. It is suggested that the user cannot make sense out of the data without supplementary information. Neither is it possible to make sense out of the events without having the neutral and factual data.

Furthermore, Goetz (1974) provides for an overview of the functions that accounting has for the management of small businesses. The author points out four distinct areas in which accounting plays a role, namely: “1. *Fixing responsibility for custodianship*, 2. *Preparing tax returns and other mandatory reports*, 3. *Determination of distributable earnings*, 4. *Directing managerial attention to problem areas*” (1974:15). It is suggested that the responsibilities for custodianship can be assisted through the provision of objective data on inventory, receivables and payables. While preparing the tax report, managers could use accounting information to have an overview of the different types of taxes that have to be paid and to make sure that this amount is appropriate. Accounting could provide information for the determination of distributable earnings, accounting. However, the author points out that managers need to be careful about omissions and obsolescence that might make it necessary to include more data in the financial reports to keep an accurate overview of the financial positions. Moreover, this will increase the comparability of different reports, so that the managers can easily recognize trends for the business. Finally, accounting

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information is supposed to direct managerial attention to crucial business areas. The author points out that every manager should have an overview over how well the business is performing. Accounting information can give the necessary input to keep a “global” overview over the company. In addition to that, the information simplifies the process of producing budgets and can help managers to come up with more realistic estimates and forecasts. Furthermore, accounting information can assist the small business in producing standards, like specifications and job evaluations that can increase the work performance. The author highlights the fact that giving them a chance to have a look at the accounting information before their superiors can further increase job performance and motivation of lower level managers. That way they would have a chance to improve their own management skills and prove that they are capable of their job.

#### *Accounting and decision-making*

One of the most widespread roles of accounting in the literature refers to its assistance in decision-making processes of both internal and external users of the accounting information. Thus, studying the relations between the accounting information and rationalized administrative decision-making in Jordanian commercial banks, Swalhah (2014) found out a strong positive relations between the two aforementioned variables. In other words, it means that accounting information produced by Jordanian commercial banks is of a high importance for the making administrative decisions. In addition to that, Dionne et al. (2011) define the main role of accounting as decision-making by means of “*financial calculations and thorough analysis*” (2011:191). In order to perform appropriate aforementioned calculations and analysis, authors emphasize the importance of the appropriate education of the decision-makers.

As it was already mentioned earlier, assistance in the decision-making of the accounting has also found a proof in the literature regarding the investment decisions. In such a way, Pranatio & Hutagaol (2009) prove a role of accounting in the decision-making process through analysis of the three major accounting information attributes, namely earnings, book value of equity and cash flow and their role in equity valuation. In turn, the author found a positive relation between the book value and of equity and cash flows, and investors' pricing decision. However, the research has

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shown that negative earnings do not disturb the investors. Besides, Wright and Robbie (1996) analyze the role of accounting for the decision-making of venture capitalists. The authors provide evidence for the fact that such investors keep themselves informed through a wide range of information sources that include both accounting and non-accounting data. Apparently, there is a crucial importance to gain access to accounting data that is unpublished including due diligence reports and business plans of the entrepreneurial enterprises that need an investment. Moreover, subjective judgments by individual analysts are highly valued in such a setting. Such judgments may include the characteristics of the entrepreneur, i.e. whether he appears to be able to run the business. Information that is based on accounting data is mainly used for valuation purposes and to arrive a reasonable target rate of return on which decisions for investments can be based. The authors point out that, while such figures are important for decision making of venture capitalists, they are not higher valued than the information that is based on non-accounting data.

In addition to the aforesaid, the influence of the accounting information quality on the decision-making should be also taken into consideration. As for example, Beatty et al. (2010) were investigating the role of accounting quality in the investment decision-making of public debt holders and banks. The authors suggest that the quality of information is more important for the public debt holders than to the bank lenders, since the former ones have restricted access to the companies' information. Moreover, the availability of private sources of information allays the influence of the accounting information quality on the investment cash-flow sensitivity.

However, Smith & Cording (2014) criticize the stewardship function of accounting in the investment decisions. Although, it is supposed that accounting information is in a high importance for potential investors, the research showed that the level of such importance has decreased dramatically. As for now, potential investors use the information from the balance sheet mostly to check the existence of loans and credits and accuracy of current assets or liabilities presentation than the analysis of current economic activities. Moreover, the authors assert that accounting information (financial information) is more important to the existing investors than to potential ones in order to control the operations and see how the operations fit into the budget.

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The authors also conclude that investors, while making decision on whether to invest or not, rather rely on their *“own due diligence to assess potential investments”* (2014:320) than on the information prepared in accordance with accounting standards.

Besides the decisions regarding the investments, accounting is widely used to make decisions on resource allocation. As for example, Carlsson-Wall & Kraus (2015) study the role of accounting on the early stage of product innovation namely the fuzzy front-end stage. The authors found out that non-financial accounting is more important one on the aforementioned stage than a financial one, since it remains difficult to forecast spending precisely. Besides, the authors underlie the importance of accounting practices (using non-financial accounting information) in making decisions regarding the mobilization of external and internal resources and support during the stage. The authors also state that accounting practices helped in *“constructing of trustworthy arguments”* (2015:191). However, the researchers showed that such accounting practices as budgeting constrain internal mobilization processes. Moreover, Bolivar et al. (2014), studying the assessment of financial stability of the local government, say that accounting financial reports of local governments give a possibility to *“assess the capability of a public sector entity to maintain service delivery over time”* (2014:233). Such an assessment will aid in making decisions regarding the potential volumes of services provided, and potential resource allocation.

However, there are a number of studies that dismiss the role of accounting in decision-making. As for example, Richardson & Kilfoyle (2009), studying accounting in network governance from transaction cost economics perspective, concluded that accounting as such *“may be reduced or absent”* (2009:955). Besides, the authors deny the importance of accounting in creation of market prices. Moreover, the researchers say that networks are structured and governed in such a way that actors are involved in different relations that are not interdependent. That is why it is senseless to try to draw the accounting interdependencies between the actors of the network, it is more important to study accounting systems of the actors in isolation. Besides, Kartalis & Athianos (2009) also reject importance of accounting for decision-making in the context of the municipality owned show caves in Greece. In

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turn, the authors state that the accounting information is neither used for day-to-day decision-making, nor as for the planning or control purposes. However, they conclude that the main purpose of accounting and accounting information is provision of institutional legitimacy and cultural support.

#### *Do you speak... accounting? or accounting as a language*

Another role of accounting highlighted widely in the literature refers to the translation, clarification and interpretation of goals, results of economic activities or particular events of the companies. As for example, Dina et al. (2012) summarized the main role of accounting in the highlighting of the economic state of the companies. Thus, they state that the information produced by accounting systems of the companies gives a possibility for "identifying, measuring, classifying, and registering operations and other acts of the company, and after specific processing to provide information to meet the needs of different user groups" (2012:614). Cushion (2013) confirms the role of accounting as a language of business in her study of the financialization of an Irish subsidiary of one of the multinational companies. In turn, in the financialization process accounting played a role of translator between the performative interventions and lower levels of the subsidiary. In other words, budgeting practices explained the goal and process of financialization to the employees. Moreover, Thomson et al. (2014) study so-called called "accounting-sustainability hybridization" that presupposes engagement of accounting into different disciplines (hybridization), and, in particular, implementation of sustainability reporting (that is why accounting-sustainability). Thus, the authors describe the mediating and governing roles of accounting in shaping and reshaping sustainability concept of the companies. While by mediating instrument the authors explain the translating role of the accounting from the programmed into the change enabler, the governing role refers to the management of defined risks of hybridization.

In addition to the aforementioned studies it is noteworthy to mention Kraus & Strömsten (2012), studying the companies that were going public (initial public offering or IPO), highlight the clarifying role of accounting. Thus, the authors state that accounting is important for sense-making and sense-giving. In turn, sense-giving refers to the assessment of the environment of company's operation, analysis of risks.

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Moreover, the authors state that accounting becomes a communication tool (language) for the managers in the turbulent environment. When it comes to sense-making, accounting serves as a background for the decisions on future orientation. Moreover, the authors state that quantitative accounting was a restriction in sense-making activities, when qualitative one had more explanatory function.

In addition to that, we found out that Joplin (1970) divides the roles of accounting between the internal (accountants and managers) and external (for example, investors, taxing authorities, etc.) users of accounting information. In turn, the former ones use it for the planning, control and decision making purposes. At the same time, accounting is used for “*discharging the accountability*” (1970:36) of the companies to the external users. However, the main point of the study refers to the “*responsibility accounting*”. Thus, “sophisticated accounting and budgeting” (1970:37) were established in order to translate goals into the quantitative indicators for each department, divide the tasks and responsibilities between different organizational units to achieve the aforementioned goals and control the achievement comparing to the preset indicators. Besides, having a focus on accounting as a technology, Lowe (1997) describes the role of accounting during a public health reform in New Zealand. The author points out that accounting provided the analyzed hospital with a framework (a “*blackbox*”) that made it possible for the health provider to assign costs to specific blood products. Within this case the managers of the provider were able to significantly reduce costs and the framework made it much easier for them to stay within prior agreed budgets. By allocating numbers to certain treatments within the hospital, it was now possible to make justified decision-making not only on the basis of personal judgment but also on the basis of economic feasibility. Thus, the author highlights the power of accounting for the “*translation and inscription of data*” (1997:439). However, it was pointed out that this process did not go without conflicts between the financial managers and the operational staff, since the operational managers saw the allocation of numbers to the specific products that have previously been free as an “*excessive simplification*” (1997:457).

Although it has been stated earlier that accounting is supposed to be a universal business language, some “difficulties in translation” can still appear. Thus, Moline

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(2008) describes accounting as a control tool in the relations between headquarter and subsidiaries. The author states that accounting traditions in the former Soviet Union countries and Western European countries differ dramatically. Besides, the paper describes one of the roles of accounting in the control system of the multinational company as the one that links “*different social systems of the part of the organization*” (2008:266). Hence, it is suggested that differences in accounting traditions and some degree of trust regarding the accounting principles create a background for the local expert system creation. In the other words, accounting on the local level is a complex system arranged by local managers that corresponds to the parental and local requirements (as for example, requirements of local subsidiaries), and, at the same time works for the benefits of the local manager (as for example, as a process that creates a set of information used for the decision-making purposes).

*Accounting and planning*

The role of accounting in the planning processes with a close relation to decision-making was extensively discussed by Neuter (1962). He defines five main areas namely product planning, source planning, facility planning, control planning and investment planning, in which managerial decisions should be made, besides, the author states that these decisions should be made based on the accounting information. The description of the areas and the types of accounting information are presented in table 4-2.

<i>Area of decision making</i>	<i>Description of the decision(s) to be made</i>	<i>Accounting information/sources of accounting information needed</i>
Product planning	Product additions, deletions or modifications	Current and forecast industry volume, the effect on the other company products, the accounting and economic profit calculations, the break-even volume, the inherent risks in manufacture
Source planning	What components should be produced in the plant and what parts or assemblies should be	Economic data essential to optimum source decision, without overlooking the nature of such

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	assigned to purchasing from the outside	factors as plant capacity, facility utilization, labor supply, etc.
Facility planning	Continuous and systematic review of fixed assets and decisions regarding such type of assets	Advance comparative cost analyses of the various alternatives as measured against the retention of the status quo, the pay-out computation, and the break-even computation
Control planning	Stimulation of operating profit improvement involving complementary programs to increase to increase revenues and decrease costs	Flexible budget and integrated performance reporting system, a profit budget, and special analytical studies of advertising and sales promotion
Investment planning	Provision of capital requirements, and the latter with the distribution of surplus proceeds. Investments might involve such alternatives as integration of such alternatives as integration of major products used in manufacturing, acquisition of comparable activities to guarantee supply or lessen competition, absorption of additional phases such as whole sailing or financing, and diversification of unrelated product types that might balance seasonal markets or make use of by-products	Balance sheet

Table 4-2: Use of accounting in planning

(Compounded by the authors from Neuner (1962:92))

An interesting example of the role of accounting in planning was presented by Linowes (1969). He highlights the importance of accounting in planning for the developing nations. The author explains the fast growth and expansion of industry and agriculture in these nations by means of accounting as *“integral part of the central planning process which they regard as essential to the desired growth”* (1969:18). Accounting is supposed to be the main instrument for measurement and control of available recourses. Besides, the author suggests that inappropriate accounting



### Empirical Findings

information will affect effective planning processes; therefore, he calls for enhancement of the quality of accounting education in these countries.

#### *Accounting and control*

In turn, accounting is described as control tool. As for example, Feies et al. (2013) underlie the importance of the accounting in the changing environments. The authors study the role of accounting through the lens of investment decisions. They suggest that accounting information serves as a control tool to check the accomplishment of the different stages of investment projects in public sector.

An empirical evidence for the fact that the role accounting as control mechanism decreases in situations where the level of uncertainty is high was presented by Abernethy & Brownell (1997). The authors propose that in such situations, it is beneficial for organizations to rely on informal personnel controls. These findings show that non-accounting based controls are necessary in the given setting, as they contribute to the effectiveness of the company. On the other hand, controls that are based on accounting information do not have a positive influence on the contribution to the effectiveness in this setting.

Accounting as a "Big Brother" of the managers was presented by Pettersen & Solstad (2007). They discuss the role that budgets and accounting information have for public sector tertiary education institutions. The study revealed that educational institution that are on the edge of implementing new reforms do not use accounting information in an efficient way. It appeared as if there were two different cultures of accounting use. On the one hand side, the management used accounting information for reporting purposes and decision-making. On the other hand side, teaching staff had no, or only limited access to such accounting information that could be used for strategic decision-making. Thus, accounting was considered to be a "Big Brother" through which the management is controlling the staff. Middle-level managers and professional staff were mostly communicating through informal mechanisms, due to the fact that they are considered to be more flexible and would therefore give more freedom to react to student's needs and other issues that need fast response.

### Empirical Findings

Adopting a historical view on the issue of accounting, Oldroyd (1995) discusses the roles that accounting had in the Roman Empire in terms of public expenditure and monetary policy. The author states that the currency at this time was not simply a tool to make payments to the army. Instead, it was used extensively for planning and decision-making. Moreover, it is suggested that emperors during that time were using accounting information to “*exercise budgetary control over public spending*” (1995:127). Based on these findings, the author points out two distinct roles for accounting, namely an operational role and a strategic role. At the operational level, the stewardship function of accounting helped to control the empire and steer the officials in different geographical areas. On a strategic level, it is argued that the emperor Augustus was able to draw extensively on accounting level to get into his position, which he controlled for forty years. While most decisions were made by initiatives from below, it is proposed that strategic accounting information was only available to the emperor himself.

#### *Accounting and corporate governance*

Ekanayake et al. (2009) state that accounting plays an important role for the corporate governance. They describe the interdependence of accounting and corporate governance as following: “*on the one hand, the quality of corporate governance influences the effective functioning of the role of accounting in organizations..., and on the other hand, accounting could influence the quality of corporate governance in organizations by providing direct as well as indirect input into the successful operation of corporate governance mechanism...*” (2009:26-28). By the direct input the authors understand the assistance of the accounting in the implementation of numerous corporate governance mechanisms in four fields of accounting, namely “*external reporting, external auditing, management accounting and internal auditing*” (2009:28). In turn, by indirect input they mean the role of accounting in the establishment of truth worthy and reliable relations inside of the companies.

External reporting provides information for the shareholders that decide on whether or not they shall sell their shares, as well as it influences the image of the company on the labor market. As for example, managers of the companies would most likely prefer to work in the companies with the better economic results, as well as their

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achievements in terms of reaching the particular economic indicators will influence their future carriers. External audit assists debt holders and shareholders through examination of the accuracy of the external reports preparation. Management accounting information serves as the background for the board of directors control over the executives' activities, and, as a result, it is also a background for managerial compensation plans development and deployment. The board of directors' audit committee can carry out internal audit in order to inspect the accuracy of the managerial accounting information.

#### *Universal soldier<sup>2</sup>*

Accounting can be explored from the point of view of different activities in the organizational context. As for example, Skærbæk & Tryggestad (2010), studying the role of accounting in the process of shaping a corporate strategy marked out several performative roles of accounting in such areas as “*strategy formulation, (re)framing the identity of the key strategic actor and constituting strategy and strategic change*” (2010:121-122). In turn, the performative role of accounting in strategy formulation refers to accounting as a tool for adaptation to the operating environment. The authors underlie the constant change of strategic actors of the companies, and, as a result, importance of their identification and attraction of attention to them by means of accounting. It is necessary to mention that corporate strategy is defined as “*emerging calculative collective and temporary achievement*” (2010:122). Thus, accounting aids with the adoption to the calculative collective changes by involvement to the strategy formulation and imposition. In addition to that, Richardson (2008) affirmed the role of accounting in the strategic renewal of British postal system. In particular, cost savings were the main driver of the business process reshaping.

It is also possible to consider accounting as an instrument to reduce or increase the level of risk. As for example, Druml (2008) states that inaccurate, incomplete or tardy accounting information can lead to a risk of loss. As for example, particularly in constructing industry accounting can produce such risk factors as “(1) *the way cash flow is managed; (2) how doubtful accounts are handled; (3) how equipment costing*

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<sup>2</sup> Accounting in different organizational contexts

### Empirical Findings

*is performed; (4) how indirect costs are allocated; (5) the way inventory is controlled; (6) how job costs are tracked; (7) how receivables are collected; (8) when financials are produced; (9) the way work-in-progress is prepared” (2008:19).*

In addition to that, Yasin et al. (2005) underlie the importance of accounting for the increase of the product quality and decrease of quality failures. In turn, the authors insist on the importance of the inclusion of quality costs into the companies' accounting systems, it is suggested that traditional accounting systems ignore such type of costs. As an alternative to the traditional accounting system, the authors suggest activity based costing, since it *“has been used to identify and accumulate quality costs that have been identified as prevention, appraisal and noncompliance (failure costs)”* (2005:328).

#### ***Carrot and stick: motivation and disciplining roles of accounting***

Accounting and accounting practices in particular are studied as motivation mechanisms in the companies. As for example, Carter et al. (2007) examine the role that accounting has for the equity compensation of CEOs within companies. The authors find a positive relationship between a favorable treatment of financial reporting and the use of stock options, thus agreeing that accounting does indeed play a role in the design of top manager's compensation schemes. It is suggested that companies that have a higher concern for accounting are more likely to shift from compensation through options towards compensation through restricted stock, since this is supposed to guarantee a longer-term incentive for the managers. However, it was also found that the amount of compensation does not change. Whether a favorable treatment of accounting is applied or not, it appears to be difficult to downsize the equity compensation that top-level managers receive.

By focusing on the issue of salary increases at an Australian higher academic institution, Mir & Rahaman (2003) discuss the facilitating role of accounting. According to the authors, a salary increase is one of the issues that has most significant impact on the financial position of the whole organization, thus there is a greater use of accounting technologies than in other bargaining processes. It is suggested that the heavy use of accounting technologies complicates the bargaining

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process and questions concerning the “*reliability and serviceability*” arise quickly. This process is further enhanced by the fact that there might be faulty numbers within the accounting information. In such a case, it is proposed that both parties would spend even more of their time in finding relevant accounting information that can be used as counter arguments to solve the issue. Therefore, the issue becomes even more complicated and conflicts between the parties are possible. Moreover, the authors argue that possible facilitating roles of accounting, such as the learning machine (Burchell, et al., 1980), are quickly overshadowed by the conflict-enhancing qualities of accounting information.

The disciplining role of accounting refers also to the requirements regarding the accounting information quality. Taking a principal-agent approach, Arya et al. (2004) discuss the role of accounting for disciplining other [from the financial accounting information] and softer sources of information. The authors show that accounting has three features, which make it useful as a disciplining tool, namely: 1. It is verified, 2. It is delayed, and 3. It is archived. Accounting serves as a way to keep other sources, e.g. from the Internet in check and helps to make sense out of soft information. It is however, argued that this role of accounting is rather subtle and might develop only over time.

#### ***Battle of wills***<sup>3</sup>

Although it was already mentioned that accounting could be a driver of a conflict, there is a number of studies that demonstrate the role of accounting in the conflict resolution. For instance, Oakes & Young (2010) provide an empirical proof of accounting being a tool for conflict resolving. In turn, authors describe a conflict between American Indian Trust Fund holders and federal government. Thus, the authors state that clear definition of accounting terms and boundaries contributed to the correct allocation of financial resources and political privilege. Moreover, Sykianakis & Bellas (2011) name accounting as “*ammunition, as an argument in situation of bargaining between conflict of interest groups*” (2011:129). Besides, the authors name accounting as the “*learning machine*” that helps to find solutions in

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<sup>3</sup> Accounting and conflict

### Empirical Findings

some uncertain situations. Furthermore, Amernic & Craig (1992) discuss the role that accounting adopts in collective bargaining processes in four different Canadian not-for-profit organizations. It is found that the organizations use accounting information not, as it might have been expected, in order to increase their knowledge about a certain aspect, but rather in order to have a reason to debate. Given that accounting is mostly an “*excuse for interaction*” the authors propose that the information is not used in the intrinsic way to persuade, but rather to facilitate the discussion between different parties.

#### ***Alarm bells ringing<sup>4</sup>***

Accounting can be involved into the criminal offenses. Compin (2009) states that accounting can serve as a tool to detect an accounting fraud as well as a tool to “*make the crime invisible*” (2009:591). The author also declares that “*as a system of information, accounting must not only inform network members of the wealth accumulated but also conceal this wealth*” (2009:599). Besides, Al-Moumany & Al Ebbini (2013) have a positive relation between the accounting information system and combating tax evasion. It means that the accounting information helps to detect and prevent tax evasion through identification of taxable income and provision of the system of penalties on tax evaders.

#### ***In the long run<sup>5</sup>***

Besides the dealing with the past, translating the events into the reports and financial statements, accounting should be definitely viewed as the instrument to influence possible future events. As for example, Huefner & Largay (2008) emphasize the role of accounting in the revenue management. Thus, the authors state that “*...accounting tools that track revenue, estimate and control cost behavior, measure opportunity cost, and perform variance analysis...*” (2008:250) are vital for the revenue management and have direct influence on the future pricing decisions.

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<sup>4</sup> Accounting and crime

<sup>5</sup> Accounting for future

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#### *Accounting as reputation*

There are some studies that underlie that accounting information has influence on the customers' judgments and purchasing decisions. Thus, for example, Tian & Zhou (2015) found out a positive relation between the accounting information and purchasing decisions of the customers in the pharmaceutical customers. The authors suggest that *“in the context of consumer choice between brand name and generic drugs, information about manufacturers' profit margins and costs in different frames evokes associations in memory predisposing consumers to develop more or less favorable attitudes towards the firms and their products”* (2015:64). Furthermore, Marquardt & Zorn (2011) found a positive relation between the quality of accounting information and negotiation during the merge and acquisition processes. In the other words, the authors found out that the better quality of the accounting information of the company considered to buy/merge with, the higher the probability to conduct negotiations with its managers than simply arrange an auction, and the other way around.

#### *Ethics, Nature, and Society*

Besides the rational and economic nature of accounting, the social and ethical sides of the phenomenon should be discussed. In turn, Beck & Lehman (2014) highlight the social attribute of social and environmental accounting. The authors assume that accounting information should be some kind of a bump for change and *“custodian of a moral good”* (2014:292). Law & Otusanya (2014) suggest that corporate social accounting in the mining sector in Tanzania aims to respecting and promoting of human rights by compilation, publication and dissemination of social and environmental reports. However, the authors found out that the aforementioned reports did not include any information or recommendations regarding the improvement of the situation (level of pollution, improvement of working conditions, etc.). Thus, the role of such type of accounting refers only to the attraction of attention. In addition to that, Sargiacomo et al. (2014), studying the actions undertaken after the earthquake in Italy in April 2009, found out that accounting in such situation of people suffering after disaster acted as an instrument that provided equality and decreased the level of suffering. Xu et al. (2014), scrutinizing the role of

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accounting in the ideological diffusion in China in the transition period between 1949 and 1957, determined indicate on of the functions of accounting as *“part of a moral and intellectual force in sustaining class power”* (2014:447). The authors show how adherents of two different ideologies (New Democracy and Leaning to One Side) defended different kinds of accounting (technical view of accounting and central planning aimed at protecting rights and supporting working class).

A study of the top 500 companies in Australia (Wilmshurst & Frost, 2001) identified the necessity for accounting and the accountants to assist management in the development and execution of an environmental management system (EMS). While the authors suggested that there are currently almost no companies where accountants have been implemented in the EMS, there are several roles that accounting could fulfill, in order to assist with the development and execution. Specifically, the data shows that CFOs in Australia see a role for accounting *“in the areas of risk assessment, capital budgeting and investment appraisal, and within the internal reporting mechanisms”*, as well as *“accounting for energy usage, rehabilitation/restoration, as part of production cost, to account for cost of legal requirements, contingent liabilities and waste”* (2001:143). In addition to the prior mentioned functions, the CFOs also see a role for accounting in cost-benefit calculations *“in relation to energy efficiency, waste management pollution minimization, site cleanup and contamination”* (2001:143). Unfortunately, it is suggested that such information is currently in many cases lost in other pieces of information and an accurate analysis is therefore oftentimes not possible or at least much more difficult than it could be. A more active integration of accountants in these areas is therefore seen as crucial by the authors of the study.

The function that accounting can bring in to the society were discussed by Patraşcu et al. (2014). The authors point out that accounting has a central role within society, especially with respect to the social-cultural environment. Within this environment, accounting is supposed to have three distinctive functions: 1. It has an educational function, due to the fact that accounting is a value that complements many other business disciplines. Therefore, it is supposed to be crucial for managers of all business disciplines to have an understanding of accounting, so that the own business



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area can be better understood. 2. Accounting functions as evidence in court. Since all businesses are required to manage their accounts in an responsible way, accounting functions as evidence of compliance with the law and it is therefore considered to be judicial evidence. 3. Accounting functions as a way to expose bias in the socio-political system. Furthermore, in a lecture for the Nobel Foundation, Stone (1984) describes the importance of accounting for society. He states that it is possible to analyze society through three pillars, namely economic, socio-demographic, and environmental phenomena. According to the author, accounting matters are mainly related to the first pillar of economic phenomena, where it assists and facilitates the life of the society by organizing data in the form of accounts.

Referring to the role that accounting has for society in making objective decisions, an anonymous author (1974) of the CPA journal made some suggestions on the way accountants can contribute. Specifically, the author showed that accountants could provide recognition for conflicts between various actors and the need to reconcile such conflicts. In addition to that, accountants could provide recognition for the prospects of setting priorities and that is of importance to attach relative values to these priorities. Accountants can assist the public in the constant changing environment by making sense out of the increasing amount of data, as well as by “*refining, testing, comparing for reliability, adequacy, and relevance*” (anon., 1974:38). In addition to that the functions of accounting were discussed on the national level. For instance, Ribera et al. (2013) provide the literature review on the role of accounting in the public governance processes. Thus, the authors identify several purposes for which accounting is used on the national levels, namely “*register, classify, inform/demonstrate, correct/compare, analyze/interpret, control/manage, optimize resources, orient on decision making, measure performance, strengthen democracy, contribute to social participation, provide power to the citizen, promote accountability, stimulate social control, influence social transformation*” (2013:2909).

#### ***Power behind the throne***<sup>6</sup>

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<sup>6</sup> Accounting and power

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Another role of accounting found in the literature refers to the power issues. Elbayoumi & Awadallah (2012) state that preparers of the accounting information have more power than the investors who use such information for decision making since preparers can emphasize the most beneficial aspects of the company's activities and understate its weak sides. Furthermore, Farjaudon & Morales (2013) were studying the roles of accounting from the point of view of consensus finding. The authors suggest that in their particular empirical case accounting played a role of so-called “*symbolic violence*” (2013:167) that was involved into different power mechanisms in order to “*consolidate influence and secure positions*” (2013:167) of actors who have a particular degree of power. Moreover, it was concluded that accounting “*can produce asymmetric positions of power and participate in the shaping of interests, so that, compromises always favor one side over the others, which the consent of those who have most to lose in the process*” (2013:169).

The role of accounting in structuring power in a family-owned business was described by Molainen (2008). The research shows that accounting in this context has a rather subtle role, due to the fact that the individuals in the company have strong control and are able to adapt the formal accounting information to their specific needs. The steering of the company is done through both formal accounting information and informal methods. While it is suggested that the formal accounting information can be helpful in establishing trust within the organization, the informal communication appeared to be of higher importance in the company, since contacts to the management increased the power of individuals and thus gave them more control in the company.

Holme et al. (2005) name accounting as “*a powerful weapon in the disempowerment and dispossession of indigenous population*” (2005:134). The authors explored the accounting practices of the five Franciscan missions in New Spain from 1718 to 1794. Their findings showed that the accountability relations between Spanish missionaries and superiors were built on a trust. The accounting books were not obligatory, and were held not for the accountability purposes, but in order to control and plan their current activities. However, the Indians in such areas were closely supervised and were obliged to describe in great details their day-to-day activities.

# Master Thesis

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## Empirical Findings

The findings from the literature are summarized in the following Figure 4-7.



Figure 4-7: Fifteen Shades of Accounting

[Source: compounded by authors]

### **5. Analysis**

Within this analytical part, the authors will show what functions/roles accounting has for the inter-organizational relationships both within the organizational border of the network of the company and outside of the organizational border in relation with the clients. As pointed out in the methodology of this thesis, the framework of Caglio & Ditillo (2012) will be used to analyze the different functions. It is suggested that this will provide important insights into the specific context and show if the roles that were proposed through the framework are applicable in the inter-organizational relationships of the network of the company Miratech, or if there are any other functions that are of relevance for this specific context. The data that was found through the conduction of a structured literature review will assist the authors in defining possible functions of accounting that are identified.

#### **5.1. Functions of accounting – Inter-organizational relationships with the clients**

As it follows from the preceding findings of the company Miratech, the subsidiary is the first contact to the client and offers therefore an important insight into the roles that accounting could offer for the inter-organizational relationship between the two separate companies.

The framework that was proposed by Caglio & Ditillo (2012) showed that in inter-organizational relationships accounting would act according to three distinct roles, i.e. an integrative role, an informative role, and a decision-making role.

#### 5.1.1. Integrative

According to the integrative role, accounting assists in the establishment of cooperation through communication and techniques like standard cost setting could help the companies to get used to each other. Within the case of Miratech, it was inherent that the information, which was exchanged with the customers, included first and foremost accounting information that could be used for the development and execution of projects. Such information that was communicated through various communication levels included project specific data like specifications and milestones that should and have been reached. Thus, it was necessary for both the managers of Miratech to get an overview over the scope and timeframe that the project should have. Moreover, costs are agreed on in the beginning of the project so that both partners know how much resources they can spend during the partnership. It was however mentioned that the costs are the only financial information that needs to be shared with the client.

Interestingly, Farjaudon & Morales (2013) propose that accounting could be used to establish certain positions during the discussions. Thus, accounting would work as kind of weapon against the other party and therefore assist in getting better deals. While the manager of Miratech did not specifically indicate this, it is reasonable to suggest that such a use of accounting information might occur during negotiations with clients. In addition to that, it was proposed that accounting information could be used, in order to legitimize actions during the execution of projects and solve conflicts. Despite the fact that the manager of Miratech commented that they would not like to do it, he showed clearly that when conflicts would arise, accounting information would be used to prove the correctness of certain actions or agreed plans. That way conflicts could be solved quickly and due to the fact that most of the information within the company is recorded in some form; it leaves small room for argumentation by either side. Therefore, it is a powerful tool for the companies to solve conflicts and avoid issues in the future cooperation. Several authors in the literature, who stated that accounting is a useful tool in bargaining situations, also pointed this out. Here, the clear definition of accounting terms and boundaries was

described as supporting companies in finding solutions to the problem (Oakes & Young, 2010). Also, Sykianakis & Bellas (2011) demonstrated that accounting helps the companies to learn from each other in uncertain environments and that it thus acts as a “learning machine”. However, it was shown that this learning function, which helps to solve conflicts in bargaining situations, would be quickly overshadowed by a conflict-enhancing role (Mir & Rahaman, 2003), if the accounting numbers were questionable. Especially, if there are numbers which appear to be wrong, more and more accounting information would be used to argue against each other, thus making conflicts worse than they were before. Hence, it is of high importance to also establish a personal basis on which the partners can discuss matters without the immediate use of accounting information.

The case suggests further that the subsidiaries are in constant communication with the clients. Reports with accounting information are exchanged on weekly basis, indicating the importance of a close relationship with the clients. Moreover, in addition to the formal reports the managers of the two parties communicate through informal ways over the phone, because it is necessary for Miratech to gain information of the client’s processes to get to know the issue that need to be improved or to gain knowledge on how it is possible to implement a new process or system into the client’s processes. Here, accounting certainly has a role in the translation of different business cultures and strategies. Several authors have pointed out that accounting can be used to make sense out of different business environments. This sense-giving function of accounting (e.g. Kraus & Strömsten, 2012) assists managers to work within uncertain environments and produce a standardized workflow that leads to more efficiency.

However, while the provision of accounting information, whether it is formal or informal, is certainly an important part in the beginning of the relationship between the subsidiary and the clients, it does not seem to be a crucial aspect. The manager of Miratech pointed it out that personal relationships to the clients are of major importance for European outsourcing providers as well. Especially in the early stage of the cooperation where the projects are still somewhat unclear, there is a high need for non-financial information as the managers cannot precisely forecast all spending

(Carlsson-Wall & Kraus, 2015). Thus, the authors would agree with Wright & Robbie (1996) that accounting information is important, but it is not much higher valued than the relationships that are established through personal contacts for the integration of a new client. Also, Kraus & Strömsten (2012) show that too much reliance on formal accounting figures in the relationship can be counterproductive in situations where other types of information might have a higher explanatory function, thus highlighting the importance of a close relationship between the separate entities. Communication through both formal and informal ways helps both companies to get adjusted to each other and to avoid issues that might come up during projects. It could also be suggested that while accounting information helps the companies to get adjusted to each other, it has perhaps an even greater role in giving the managers of the different companies a reason to discuss, as claimed by Amernic & Craig (1992).

#### 5.1.2. Informative

The informative role proposes that accounting information helps managers to keep control over the projects in the relationship. This stewardship function is considered to be one of the intended functions of accounting (Burchell et al., 1980, Mellemvik et al., 1988) and it is suggested that the information will give feedback on matters that concern issues like compliance with responsibilities and whether the projects are going as they should.

This finding is underlined by the finding that several authors expressed a need accounting to assist managers in keeping control over projects. For instance, in a classical paper Camman (1947) stated that companies need information on the workflow of projects to keep an overview of the concurrent costs. Companies are usually working within budgets and it is therefore crucial to know if projects are within the plan and if everything is working as it should. The finding from this article was conducted in a setting that concerned a single company, however, the experience from Miratech shows that this is as well applicable to an inter-organizational setting. The information that is transferred between the companies included milestones and

other project related information that informs the client over the current state of the project. Therefore, it permits the control of the project.

In addition to that, Yasin et al. (2005) proposed that companies need to include quality costs into their accounting system, as this information could provide critical input into the ongoing operations and would therefore be helpful in the improvement of quality of the final product or service. It was found that e.g. activity-based costing could provide the necessary information for the managers to evaluate the costs in an efficient way. The case of Miratech shows that this is also true for an inter-organizational setting, since it was found that the company uses a costing system that is based on activity-based costing to evaluate the processes of the client. This information is however first and foremost used to improve the processes of the client, which is part of most projects. It is, as far as this was apparent from the interview with the manager of Miratech, not used in order to steer the relationship between the companies. This highlights the hybrid character of the outsourcing relationship, where the client is still a separate company that is not so much integrated that the relationships would be steered in conjunction. Therefore, the informative role in the case of Miratech concerns only single projects, where the accounting information can help managers of both sides to keep a “global overview” (Goetz, 1974) of the current state of projects and serve as a control tool to assess accomplishments during the projects (Feies et al., 2013).

#### **5.1.3. Decision-Making**

The decision-making role asserts that accounting information would assist in the classical “make-or-buy” decision, where the companies have to decide if it makes sense to outsource a certain activity to another company, or if it should be better done in-house. As the manager of Miratech put it, outsourcing providers can oftentimes perform an activity better, faster and cheaper and it is therefore reasonable to suggest that outsourcing makes sense for many companies. However, the feasibility must be assessed and it is proposed that the decision-making role of accounting can assist



managers in this task. Moreover, it suggests that the information would help managers to assess on a constant basis, the feasibility of the projects and the relationship to the partner or client.

Being one of the intended functions of accounting, it seems clear that this function must also be found in the relationship between Miratech and its clients. Obviously, before entering the relationship with Miratech, the client needs to know the approximate cost and scope of the project and use this information for the make-or-buy decision. Thus, accounting information assists in the purchasing decision, as it was pointed out by the authors Tirana & Zhou (?). Likewise, Bolivar et al. (2014) showed that in a public sector setting, accounting would help the government to make decisions that regarded the potential resources, which would be necessary for the maintenance of service. As it follows from the case of Miratech, this seems to be the case also in an inter-organizational setting, where the companies have to assess how many resources they have to allocate to projects.

The information that is communicated between the managers of Miratech and the client, especially the weekly formal reports, make it possible to assess the cooperation and the current state of the projects. If it should occur that anything should not go as it was planned, it is only natural for the managers to decide if the relationship is working or not. Here, especially the fact that accounting is a common language between the different companies is helpful to make decisions. The system identifies, measures, classifies, and registers information, making it possible for the users to build their opinion on facts (Dina et al., 2012).

The manager of Miratech suggested that the main function for accounting both within the company and within the relationships to the customers would be to use it for decision-making. While it should be highlighted that the information that is transferred between the companies is mostly project related, it was shown by Lowe (1997) that accounting helps to translate objects into economic figures, making it therefore possible to build economically justified decision upon. Therefore, it is of high importance for the managers in the inter-organizational relationship to have accounting figures that can assist them in their work.

#### **5.2. Functions of accounting – Inter-organizational relationships inside of the organizational boundaries**

Due to the fact that intra-organizational relationships within a multinational organization should be considered as inter-organizational relationships (Ghoshal & Bartlett, 1990), it is proposed that the framework by Caglio & Ditillo can be applied to the relationships within the organizational boundaries of the network as well.

Based on the findings of the accounting flow within the network of the different entities of the company Miratech, it becomes inherent that the centralized organization has a large influence on the functions of accounting. Thus, accounting information is mostly formal financial information that is registered in the headquarters. Here, the employees of the accounting department prepare formal reports that are distributed both to the management of the company and to the subsidiaries. That way the subsidiaries get to learn their own financial positions, over which they do otherwise have no control over.

##### **5.2.1. Integrative**

In the case of the introduction of new entities, such as subsidiaries or research centers, it is suggested by the manager that accounting information would not have a significant role for the integration. However, it must be mentioned that the information provides for a common language throughout the organization, since the entities do not have their own standards. All financial information is registered according to the standards of the Swedish, respectively the American headquarters. Thus, conflicts resulting from the national and cultural differences that the different locations of the entities suggest do not occur. Moreover, it is stated that the organization has already a long history of outsourcing in different countries of the world and that the experience basis simplifies the integration process significantly. This is in line with the study by Hooks & Steward (2015), which suggested that

accounting is part of the organizational culture. Accounting acts as a learning machine, through which the company can build up a common organizational culture that helps the entities to get integrated into the network. Therefore, accounting could be expected to take a significant part in the integration of entities in the network, even though this was not specifically stated in the interviews.

Many of the articles that have been written on the topic of the roles of accounting do also realize the function that accounting has for the distribution of power. For instance, Holme et al. (2005) addressed the fact that accounting is oftentimes used in order to establish an accountability structure within the organization, so that it becomes easier for the members to know who is responsible to whom and what responsibilities one has. Therefore, it would also help in the integration of new entities in the network of Miratech as it becomes obvious which responsibilities and rights the different entities have. However, during the interviews such a function of accounting information could not be directly identified. The headquarters register accounting information and send final reports to the different entities, but it was not suggested that this would be a way to distribute the power within the company. Furthermore, the responsibilities within the company are clearly defined, as the subsidiaries handle most of the business with the clients, research centers identify solutions for the subsidiaries, and headquarters are responsible for the administrative issues of the organization. Therefore, issues concerning the accountability and power distribution do in general not occur in Miratech.

#### **5.2.2. Informative**

Stewardship of an organization is generally considered to be one of the main functions of accounting, however the manager of the subsidiary suggested that the headquarters would not use accounting information to “monitor, control, or steer the business”. The authors found this quite interesting as most of the findings from the literature that discussed the functions of accounting showed that these would be the main reasons for the application of accounting. While it is the case that the

subsidiaries can steer the business with the clients on their own, it must be mentioned that they do receive budgets from the headquarters. The managers of the subsidiaries can use the budgets as a way to get into a positive future direction and not to lose the focus on the business. Especially with respect to the project control this is of crucial importance. The managers need to have an overview over the expenses that happen during the projects with the clients and with the help of budgets the managers can then determine if the projects become too expensive or if they are economically still feasible (Camman, 1947). Moreover, Joplin (1970) and Cushion (2013) show that the translation of goals into quantitative indicators through e.g. budgets could be a way for the headquarters to keep control over the organization, as it allows the management to see how the entities are performing according to the goals that the company has.

In addition to the budgets, the company also publishes accounting information that is afterwards available for the public. It was proposed that the company publishes the results even though it is not publicly listed and therefore not legally required to do so. Instead, through the publishing of accounting information the company establishes a certain image for the public that allows attracting both new customers and employees. As pointed out by Ekanayake et al. (2009), accounting has a role for the corporate governance of the business. Since managers would prefer to be employed in companies that have positive economic results, accounting information establishes the grounds on which the company can base its image and can thus attract employees and motivate the already existing employees. Also for the customers it is important to know that the company is performing with positive results, since this suggests that the performance is good. This is important especially in outsourcing, where clients trust the outsourcing provider to improve whole business processes. Therefore, it is comforting to know that other companies also trust the outsourcing provider and that it is safe to do the same.

#### 5.2.3. Decision-Making

First and foremost, it was suggested that the accounting information within the organization would be used for strategic decision-making. This statement by the Norwegian manager is supported by the fact that accounting information which comes from the different entities of the company is used to build up business cases that can guide managers of the subsidiaries to make strategic decisions. Thus, accounting acts as a learning machine through which the company and the managers can learn from past decisions and make better decisions in the future. Moreover, this would be in line with the findings by Skærbæk Tryggestad (2010), who suggested that accounting assists in the strategy formulation of organizations as it helps to formulate the goals that should be achieved in an uncertain environment and the toll that has to be paid in order to succeed in doing so.

In addition to that, the accounting information that is accumulated in the headquarters can be used for long-term planning of the organization. Due to the fact that accounting information is the main instrument or the measurement and control of the resources that are available within the company (Linowes, 1969), it is suggested that it serves for several types of planning of the organization's future. Huefner & Largay (2008) show that accounting information does not assist a company in the assessment of past events, but that it has a major role in the provision of information that the company needs to assess future events and to control it through the provision of budgets and other financial statements.

Within the literature, it became inherent that many other roles for accounting are applied by organizations in relation to the decision-making in terms of ethical and social issues. This could not be observed in the case of Miratech, where the accounting information is merely used to build up a database from which the managers can learn for strategic decisions and to make decisions on the future of the company.

5.3. Summary

The authors find that the roles for accounting as suggested by Caglio & Ditillo (2012) are in general applicable to the specific context of inter-organizational relationships of offshore outsourcing providers. However, it is suggested that these roles are by far too broad and include many different functions that are believed to be noteworthy as they describe much more specific what accounting is used for. In the case of Miratech it is therefore found that within the organizational boundaries of the network of the multinational company Miratech, accounting information is used to collect data that can be used to improve the learning process of the company, make strategic decisions and establish a positive image towards the public. The different entities are steered by themselves, but do receive budgets and financial reports on a periodic basis, suggesting that there is a certain control and steering function by the headquarters as well. The centralized accounting function in the headquarters allows the managers of the subordinated entities to focus on the business with the clients without having to focus on the numbers that are accumulated during the period. On the other hand, the budgets give the managers a certain limit and can act motivating to further improve the business in future periods.

The following table summarizes the different functions that have been found in the inter-organizational relationships within the company in relation to the functions of accounting that have been identified through the literature review.

Integrative Role	Informative Role	Decision-Making Role
Learning machine	Operational and strategic role	Decision-Making
Facilitating	Motivation	Future
Corporate Governance	Reputation	Planning

Table 5-1: Functions of accounting within the organizational boundaries of the network

(Own illustration)

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### Analysis

Within the inter-organizational setting that is beyond the organizational boundaries, accounting helps the managers of the subsidiaries to steer projects and assist with the integration process of new clients. Accounting information helps to solve conflicts and enables the local managers to make short-term decisions within the given budget from the headquarters. However, it cannot be overstated that within most of the relations personal communication and contacts are at least just as valuable as accounting data. While the accounting information comforts each party and enables them to build up an image about the processes, informal communication is always necessary to build up the relationships and improve the business. Too much reliance on formal accounting information can additionally increase the risk of a conflict-enhancing situation that could be prevented through communication that does not rely on pure data.

The following table summarizes the different functions that have been found in the inter-organizational relationships with the clients in relation to the functions of accounting that have been identified through the literature review.

Integrative Role	Informative Role	Decision-Making Role
Shaping of interests	Global overview	Make-or-buy decision
Conflict-solving	Project Control	Resource-allocation
Conflict-enhancing	Enhancement of product quality	Decision-making
Reason for discussion		
Building of personal relationships		
Legitimation		
Learning Machine		
Translation, Interpretation, Clarification		

Table 5-2: Functions of accounting in the relationship with the clients

(Own illustration)

Thus, it is possible to compare the three main roles of accounting described by Caglio & Ditillo (2012) to three colors. However, it is known that every color has many shades. The same is happening with the roles of accounting. If for example, we compare the integrative role to the color: red, then shaping of interests can be described as the shade: cherry, and accounting as legitimation can be compared to the shade: mahogany. Obviously, the choice of the shade within this example is random, however, it shows that the variety of shades within the color is great and a color cannot be described with just one feature. The combination of the features creates the whole picture. Thus the variety of different functions of accounting describes the three colors, namely integration, information, and decision-making, but it is difficult to tell which shades make up the color, or the specific functions that accounting can possess.



## 6. Conclusions

### 6.1. Summary of the research

Throughout the course of this master thesis, the authors explored the research question what roles/functions accounting has in inter-organizational relationships in the network of a multinational company. The aim of the study was to increase the knowledge of the topic in a setting that has been scarcely explored by previous literature. Moreover, the study should add knowledge to the findings by Caglio & Ditillo (2012), who demanded for more research of the roles of accounting in the setting of inter-organizational relations. This research should preferably include an industry, which has similar characteristics to the fashion industry and thus it was decided to choose the ICT industry that is supposed to have adopted many characteristics of the previously mentioned fashion industry.

The authors adopted a case study approach of the international outsourcing provider Miratech that has its source in Kiev, Ukraine, but whose European headquarters are located in Sweden. The network of the company includes local subsidiaries in different countries that have the responsibility to attract customers and assist them during the outsourcing process. In addition to that the network includes research centers, which are responsible for the development of solutions for the customers of the local subsidiaries. The company turned out to be very much centralized, having accounting departments only in the local headquarters in Sweden and the US as well as in the operational headquarter in Ukraine. Due to the fact that the information that was gained from the interviews with the company have been limited, a structured literature review of the functions of accounting provided additional insights into the field and served as useful input to the study.

It was found that the framework that was suggested by Caglio & Ditillo (2012) was in general applicable to the inter-organizational relationships of the network Miratech. However, the authors would suggest that the three roles integration, information, and

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decision-making are too broad to explain the specific functions that accounting actually has within the relationships. Thus, it was found that during the bargaining process of the integration of new customers accounting acts both conflict-solving and conflict-enhancing, as it acts as a language that can help to make sense out of certain situations and it assist in legitimizing actions. However, it could also be argued that during the integration of new clients, the main function of accounting is to support the building of personal relationships, which are seen to be of major importance for European outsourcing providers. Similarly, there are several functions that have been identified within the suggested informative role of accounting. Here, accounting is especially valuable for project control and to gain a “global overview” of the ongoing activities. Within the decision-making role, it was shown that the accounting information assists with the allocation of resources, thus highlighting the role that it has for decision-making of the managers.

Within the inter-organizational relationships that are inside of the organizational borders of the network it was found that the headquarters mainly used accounting information to gain an overview over the ongoing operations and to give the subordinated entities a frame within which they could operate. For the integration of new entities it was suggested that accounting is a part of the organizational culture, thus simplifying the integration process. Moreover, the authors suggested that accounting would support the integration through distribution of power and accountability throughout the network. However, these functions were not specifically mentioned within the interview and should therefore be further investigated. Within the informative role, it was inherent that the headquarters do not use accounting to steer the business of subordinated entities. However, budgets help the managers of the subsidiaries and research centers to stay within a certain frame. Moreover, the company uses accounting information to establish a positive image for the public, thus making the company attractive for new employees and motivate existing ones. Finally, accounting information is used for decision-making and it is suggested that this includes the function that accounting provides for long-term planning of the company.

### 6.2. Implications for further research

During the research process, there appeared some unforeseen challenges that provide opportunities for future research. The network of the company Miratech proved to be a challenging case, due to the fact that the use of accounting information is very centralized within the organizational borders. It is suggested that more fruitful results could result from a study that analyzes a network where the different entities have their own accounting departments and possibly conflicting goals that might influence the use of accounting information within the organizational boundaries of the network. Moreover, it might be interesting to further study the inter-organizational relationships outside of the organizational boundaries not with respect to the clients, where the relationship is naturally mostly based on contracts, but also with respect to suppliers or possibly competitors that could have similar goals, thus permitting a much closer cooperation. Here, there are possibilities to examine the role that e.g. open-book accounting has for the relationship of the different entities - a phenomenon that could not be observed in the relationship between Miratech and its clients.

In addition to that, the access to the network was strongly limited and it turned out that outsourcing providers are not very interested in an analysis of how accounting is used in inter-organizational relationships. It is suggested that access to the clients would have been beneficial, but due to the fact that Miratech did not want any involvement of the clients into the case, ethical consideration made this impossible. Further research in the area of outsourcing providers could involve the opinion of the clients on how accounting is used.

Another limitation that limited the results from the study was the proposed timeframe of the study that was limited to three months. Much research in the area of inter-organizational relationships is based on longitudinal case studies and it is therefore suggested that this method could give much deeper insights into the roles that accounting has in the relationships. While interviews with managers give much information, it is rather subjective and observations from a longitudinal study where the researcher is involved in the practice could provide understandings that add more validity to the study.

## 7. List of References

- Abernethy, M. A., Brownwell, P.** (1997). Management control systems in research and development organizations: The role of accounting, behavior and personnel controls. *Accounting, Organizations and Society*, [22:3], pp. 233-248.
- Ahmed, A. S., Duellman, S.** (2010). Evidence on the role of accounting conservatism in monitoring managers' investment decisions. Working paper. Rochester: Social Science Research Network.
- Al-Moumany, S., & Al Ebbini, M. M.** (2013). The role of accounting information systems (AIS) in combating tax evasion. *Interdisciplinary Journal of Contemporary Research in Business*, [5:6], pp. 73-91.
- Amernic, J., Craig, R.** (1992). Employer equivocality and union heterogeneity as determinants of the role of accounting in collective bargaining. *Accounting, Auditing & Accountability Journal*, [5:1], p.60.
- Anderson, J. C., Håkansson, H., Johanson, J.** (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, [58], pp. 1–15.
- Anonymous.** (1974). The role of accounting. *The CPA Journal (Pre-1986)*, [44:9], p.38.
- Appannaiah, H. R., Reddy, P. N., Ramanath, H. R.** (2010). *Business research methods: (including skill development)*. Mumbai [India] : Himalaya Pub. House.
- Arya, A., Glover, J., Mittendorf, B., Zhang, L.** (2004). The disciplining role of accounting in the long-run. *Review of Accounting Studies*, [9:4], pp. 399-417.
- Barringer, B. R., Harrison, J. S.,** (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. *Journal of Management*, [26:3], pp. 367–403.
- Beatty, A., Liao, W. S., & Weber, J.** (2010). The effect of private information and monitoring on the role of accounting quality in investment decisions. *Contemporary Accounting Research*, [27:1], p. 17.
- Beck, C., Lehman, G.** (2014). On Malpas, and Brennan's “The role of social accounts: Situating political ideas”. *Accounting Forum*, [38:4], pp. 291-295.
- Benito, G.R.G., Dovgan, O., Petersen, B., Welch, L.S.** Offshore outsourcing: A dynamic, operation mode perspective, *Industrial Marketing Management* [42:2], pp. 211-222
- Blau, P.** (1968). Social exchange. In D. L. Sills (Ed.), *International Encyclopedia of the Social Sciences*, [7], pp. 452-457. New York: Macmillan & Free Press.
- Bolívar, M., Pedro Rodr, Galera, A. N., & Muñoz, L. A.** (2014). New development: The role of accounting in assessing local government sustainability. *Public Money & Management*, [34:3], pp. 233.

### List of References

- Brandau, M., & Hoffjan, A. H.** (2010). Exploring the involvement of management accounting in strategic decisions and control. *Journal of Accounting & Organizational Change*, [6:1], 72-95.
- Brewer, P. C., Kennedy, F. A.** (2006). Motivating Lean Behavior: The Role of Accounting. *Cost Management*, [20], p. 22.
- Brunsson, N.** (1986). Organizing for inconsistencies: on organizational conflict, depression and hypocrisy as substitutes for action. *Scandinavian Journal of Management Studies*, [2:3-4], pp. 165-185.
- Burchell, S., Clubb, C., Hopwood, A., Hughes, J., Nahapiet, J.** (1980). The roles of accounting in organizations and society. *Accounting, Organizations and Society*, [5:1], pp. 5-27.
- Caglio, A., Ditillo, A.** (2008). A review and discussion of management control in inter-firm relationships: Achievements and future directions. *Accounting, Organizations and Society*, [33], pp. 865– 898.
- Caglio, A., Ditillo, A.** (2012). Interdependence and accounting information exchanges in inter-firm relationships. *Journal of Management and Governance*, [16], pp. 57-80.
- Camman, E. A.** (1947). An outline of the functions of accounting in industrial management. *Journal of Accountancy (Pre-1986)*, [84:1], p.29.
- Caniato, F., Elia, S., Luzzini, D., Piscitello, L., Ronchi, S.** (2014) Location drivers, governance model and performance in service offshoring, *International Journal of Production Economics*.
- Carlsson-Wall, M., Kraus, K.** (2015) Opening the black box of the role of accounting practices in the fuzzy front-end of product innovation. *Industrial Marketing Management*, [45], pp.184-194.
- Carruthers, B. G., Espeland, W. N.** (1991). Accounting for Rationality: Double-Entry Bookkeeping and the Rhetoric of Economic Rationality. *American Journal of Sociology*, [97:1], pp. 31-69.
- Carter, M. E., Lynch, L. J., Tuna, I.** (2007). The role of accounting in the design of CEO equity compensation. *The Accounting Review*, 82(2), 327-357.
- Chang, L. S., Most, K. S., Brain, C. W.** (1983). The Utility of Annual Reports: An International Study. *Journal of International Business Studies*, [14:1], pp. 63-84.
- Compin, F.** (2008). The role of accounting in money laundering and money dirtying. *Critical Perspectives on Accounting*, [19:5], pp. 591-602.
- Cooper, R., Slagmulder, R.** (2004). Interorganizational cost management and relational context. *Accounting, Organizations and Society*, [29], pp. 1–26.
- Creswell, J. W.** (1998) *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Cushen, J.** (2013). Financialization in the workplace: Hegemonic narratives, performative interventions and the angry knowledge worker. *Accounting, Organizations and Society*, [38:4], pp. 314-331.

### List of References

- Dekker**, H. C. (2004). Control of inter-organizational relationships: evidence on appropriation concerns and coordination requirements. *Accounting, Organizations and Society*, [29], pp. 27-49.
- Dinca**, M.-M., Paul, V. N., Bogdan, C. (2012). The role of accounting information in the economic entity. *Seria Stiinte Economice*, [18], 611-615.
- Doinea**, O., Lepadat, G., Tomita, V., Daniasa, I. (2011). The role of accounting information in decision-making strategies and processes. *Economics, Management and Financial Markets*, [6:2], pp. 188-193.
- Druml**, D. F. (2008). The role of accounting in assessing construction risk. *Construction Accounting & Taxation*, [18:3], pp. 18-26.
- Easterby-Smith**, M., Thorpe, R., Jackson, P. (2012). *Management research* / Mark Easterby-Smith, Richard Thorpe and Paul Jackson. Los Angeles ; London, SAGE.
- Eggers**, F., Kraus, S., Covin, J.G. (2014). Traveling into unexplored territory: Radical innovativeness and the role of networking, customers, and technologically turbulent environments. *Industrial Marketing Management*, [43:8], pp. 1385-1393.
- Eisenhardt**, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, Vol. 14, No. 4, pp. 532-550.
- Ekanayake**, A., Perera, H., & Perera, S. (2009). Towards a framework to analyse the role of accounting in corporate governance in the banking sector. *Journal of Applied Management Accounting Research*, [7:2], pp. 21-40.
- Elbayoumi**, A. F., **Awadallah**, E. A. (2012). Macro and micro earnings manipulation: The role of accounting standard setting process. *GSTF Business Review (GBR)*, [2:2], pp. 24-32.
- Emerson**, R. M. (1981). Social Exchange Theory. In M. Rosenberg and R. Turner (Eds.), *Social Psychology: Sociological Perspectives*, pp. 30-65. New York: Basic Books.
- Emerson**, R.M. (1976). Social Exchange Theory. *Annual Review of Sociology*, [2], pp. 335-362.
- Ezzamel**, M. (2009). Order and accounting as a performative ritual: Evidence from ancient Egypt. *Accounting, Organizations and Society*, [34], pp. 348-380.
- Farjaudon**, A., **Morales**, J. (2013). In search of consensus: The role of accounting in the definition and reproduction of dominant interests. *Critical Perspectives on Accounting*, [24:2], 154-171.
- Feies**, G.C., Feies, C., Mates, D., Cotlet, D. (2013). The Role of Accounting Information within the Management Process of Public Utilities Services. *Procedia - Social and Behavioral Sciences*, [83], pp. 711-716.
- Fess**, P. E., **Holzer**, H. P. (1964). The diverse functions of accounting. *Journal of Accountancy (Pre-1986)*, [118:2], p.49.
- Frankfort-Nachmias**, C., **Nachmias**, D. (1996). *Research Methods in the Social Sciences* (5th ed). New York St. Martin's Press.



### List of References

- Garrison, R. H.** (2008). *Managerial Accounting [12<sup>th</sup> Edition]*. Boston: McGraw-Hill/Irwin.
- Gårseth-Nesbakk, L., Mellemvik, F.** (2011). The construction of materiality in government accounting: A case of constraining factors and the difficulties of hybridization. *Financial, Accountability and Management*, [27:2], pp 195-216.
- Gårseth-Nesbakk, L., Timoshenko, K.** (2014). *The functions of accounting revisited - new meanings and directions*. In A. Bourmistrov & O. Olson (Eds.), *Accounting, management control and institutional development* (pp. 141-156). Oslo: Cappelen Damm Akademisk.
- Ghoshal, S., Bartlett, C. A.** (1990). The Multinational Corporation as an Interorganizational Network. *The Academy of Management Review*, [15:4], pp. 603-625.
- Goetz, B. E.** (1974). The role of accounting in helping small business remain solvent. *Journal of Small Business Management (Pre-1986)*, [12:3], p.15.
- Gylling, M., Heikkilä, J., Jussila, K., Saarinen, M.** (2015). Making decisions on offshore outsourcing and backshoring: A case study in the bicycle industry, *International Journal of Production Economic* [162], pp. 92-100
- Håkansson, H., Lind, J.** (2004). Accounting and Network Coordination. *Accounting, Organization and Society*, [29], pp. 51-72.
- Håkansson, H., Lind, J.** (2007). Accounting in an Inter-organisational Setting. In C. S. Chapman, A. G. Hopwood, & M. D. Shields (Eds.), *Handbook of Management Accounting Research* (Vol. 2). Oxford: Elsevier, 885-902.
- Healy, M., Perry, C.** (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research*, [3:3], pp. 118-126.
- Holmes, S. A., Welch, S. T., Knudson, L. R.** (2005). The role of accounting practices in the disempowerment of the Coahuiltecan Indians. *The Accounting Historians Journal*, [32:2], pp. 105-143.
- Hooks, J., Stewart, R.** (2015). The changing role of accounting: From consumers to shareholders, *Critical Perspectives on Accounting*. Available online 6 April 2015, ISSN 1045-2354, <http://dx.doi.org/10.1016/j.cpa.2015.03.001>.
- Hopwood, A. G.** (1996). Looking across rather than up and down: On the need to explore the lateral processing of information. *Accounting, Organizations and Society*, [21], pp. 559-560.
- Hoque, Z.** (2003) *Strategic Management Accounting: Concepts, Processes and Issues*, 2nd Edition, Pearson.
- Huefner, R. J., Largay, James A., I,II.** (2008). The role of accounting information in revenue management. *Business Horizons*, [51:3], p. 245.
- Jacobs, K.** (2005). The sacred and the secular: Examining the role of accounting in the religious context. *Accounting, Auditing & Accountability Journal*, [18:2], pp.189-210.
- Jones, S. L., Van de Ven, A. H.** (2013). Interorganizational networks. In E.H.

### List of References

- Kessler (Ed.), *Encyclopedia of Management Theory*, Sage: Thousand Oaks, CA.
- Joplin**, B. (1970). What business are we in? information!. *Management Accounting (Pre-1986)*, [51:4], p. 36.
- Kajüter**, P., **Kulmala**, H.I., (2005). Open-book accounting in networks: Potential achievements and reasons for failures. *Management Accounting Research*, [16], pp. 179-204.
- Kartalis**, N., **Athianos**, S. (2009). The role of accounting control systems in the four show caves in Greece. Working Paper. Rochester: Social Science Research Network.
- Khan**, N., & **Fitzgerald**, G. (2004). Dimensions of offshore outsourcing business models. *Journal of Information Technology Cases and Applications*, [6:3], pp. 35-50.
- Kirk**, K., **Mouritsen**, J. (1996). Spaces of accountability: Systems of accountability in a multinational firm. In R. Munro & J. Mouritsen (Ed.), *Accountability: Power, ethos and the technologies of managing*: pp. 245-260. London: International Thomson Business Press.
- Kordlouie**, H., Mohammadi, F., Naghshineh, N., Tozandejani, M. (2014). Role of accounting conservatism on the quality of financial statements. *International Journal of Business and Management*, [9:1], pp.129-139.
- Kothari**, S. P., **Lester**, R. (2012). The role of accounting in the financial crisis: Lessons for the future. *Accounting Horizons*, [26:2], 335-351.
- Kraus**, K., **Strömsten**, T. (2012). Going public: The role of accounting and shareholder value in making sense of an IPO. *Management Accounting Research*, [23:3], pp. 186-201.
- Kurniawati**, E.P., Krniawan, E.Y., Kristiani, M. (2013). Accounting Information for Business Decision Making and Performance Assessment in Small and Medium Enterprises (SMEs). *The Journal of Social Science* [76], pp. 67-95.
- Lahiri**, S., **Kadua**, (2011). B.L. Co-evolution of institutional and organizational factors in explaining offshore outsourcing. *International Business Review* [20:3], pp. 252-263
- Lauwo**, S., **Otusanya**, O.J. (2014). Corporate accountability and human rights disclosures: A case study of Barrick Gold Mine in Tanzania. *Accounting Forum*, [38:2], pp. 91-108.
- Leuz**, C., **Wüstemann**, J. (2003). *The role of accounting in the german financial system*. Rochester: Social Science Research Network.
- Lind**, J., **Thrane**, S. (2005). Network accounting. In: Jönsson, S. & Mouritsen, J. (eds.), *Accounting in Scandinavia – The Northern Lights*, pp. 115-137. Malmö: CBS/Liber.
- Linowes**, D. F. (1969). The role of accounting in emerging nations. *Journal of Accountancy (Pre-1986)*, [127:1], p. 18.
- Lowe**, A. D. (1997). The role of accounting in the processes of health reform: Providing a "black box" in the costing of blood products. *Management Accounting*



List of References

- Research*, [8:4], pp. 439-458.
- Marquardt, C., Zur, E.** (2010). The role of accounting quality in the M&A market. Working paper. Rochester: Social Science Research Network.
- Mellemvik, F., Gårseth-Nesbakk, L., Olson, O.** (2005). *Northern lights on public sector accounting research – dominate traits in 1980-2003*. In S.Jönsson and J. Mouritsen (Eds.), *Accounting in Scandinavia – the Northern Lights* (299-319). Malmö: Liber AB.
- Mellemvik, F., Mosen, N., Olson, O.** (1988). Functions of accounting – a discussion. *Scandinavian Journal of Management*, [4], pp. 101-119.
- Miratech** (2014). *Miratech Announces 2014 Business Results*, Press Release, February 20<sup>th</sup> 2015. Available online: [http://miratechgroup.com/sites/default/files/images/miratech\\_press\\_release-\\_miratech\\_announces\\_2014\\_business\\_results\\_english\\_public\\_release\\_2015-02-20.pdf](http://miratechgroup.com/sites/default/files/images/miratech_press_release-_miratech_announces_2014_business_results_english_public_release_2015-02-20.pdf)
- Moilanen, S.** (2008). The role of accounting and an intermediate subsidiary in the management control system. *Management Accounting Research*, [19:3], pp. 252-269.
- Moilanen, S.** (2008). The role of accounting in the management control system: A case study of a family-led firm. *Qualitative Research in Accounting and Management*, [5:3], pp. 165-183.
- Monahan, S. J.** (2005). Conservatism, growth and the role of accounting numbers in the fundamental analysis process. *Review of Accounting Studies*, [10:2-3], pp. 227-260.
- Monir, Z. M., Abu, S. R.** (2003). The role of accounting in the enterprise bargaining process of an Australian university. *Accounting, Auditing & Accountability Journal*, [16:2], pp. 298-315.
- Mouritsen, J., Hansen, A., Hansen, C.Ø.** (2001). Inter-organizational controls and organizational competencies: episodes around target cost management/functional analysis and open book accounting. *Management Accounting Research*, [12], pp. 221-244.
- Mouritsen, J., Thrane, S.** (2006). Accounting, network complementarities and the development of inter-organisational relations. *Accounting, Organizations and Society*, [31], 241–275.
- Mukherjee, D., Gaur A.S., Datta, A.** (2013). Creating value through offshore outsourcing: An integrative framework. *Journal of International Management* [19:4], pp. 377-389
- Naghshbandi, N., Ombati, R. M., & Khosravi, V.** (2015). The role of accounting in financial crisis. *Asia Pacific Journal of Management & Entrepreneurship Research*, [4:1], pp. 130-137.
- Nakatsu, R.T., Iacovou, C.L.** (2009). A comparative study of important risk factors involved in offshore and domestic outsourcing of software development projects: A two-panel Delphi study. *Information & Management* [46:1], pp. 57-68

### List of References

- Neuner, J. J. W. (1962). The role of accounting in decision making. *Journal of Accountancy (Pre-1986)*, [113:2], p. 92.
- Nicoleta-Cornelia, B., Sorina-Geanina, M., Mihaela, C.D., Rodica, D. (2012). Accounting and Extra-accounting Information - Valences in Meeting the Financial Analysis. *Procedia - Social and Behavioral Sciences*, [62], pp. 531-535.
- Oakes, L. S., & Young, J. J. (2010). Reconciling conflict: The role of accounting in the American Indian trust fund debacle. *Critical Perspectives on Accounting*, [21:1], pp. 63-75.
- Oldroyd, D. (1995). The role of accounting in public expenditure and monetary policy in the first century AD Roman Empire. *The Accounting Historians Journal*, [22:2], p.117.
- Otley, D. T., Berry, A. (1994). Case study research in management accounting and control. *Management Accounting Research*, [5], pp. 45-65.
- Otley, D., 1994. Management control in contemporary organizations: towards a wider framework. *Management Accounting Research*, [5], pp. 289-299.
- Patrascu, L., Bordeianu, G., Radu, F., Paraschivescu, M. (2014). Social and cultural functions of accounting. *Economy Transdisciplinarity Cognition*, [17:2], pp.43-48.
- Pettersen, I., Solstad, E. (2007). The role of accounting information in a reforming area: A study of higher education institutions. *Financial Accountability & Management*, [23:2], pp. 133-154.
- Pike, R., Sharp, J., Kantor, J. (1988). The role of accounting information in valuing unlisted shares. *Accounting and Business Research*, [18:71], p.249.
- Pranatio, E., Hutagaol, Y. (2010). Revisited: The role of accounting information of LQ45 firms on equity valuation after the Asian economic crisis. Working Paper. Rochester: Social Science Research Network.
- Riahi-Belkaoui, A. (2004). *Accounting Theory [5th ed.]*. Hampshire: Cengage Learning.
- Ribeiro, L., Pereira, J. R., de Benedicto, G. C. (2013). The role of accounting in public governance process. *African Journal of Business Management*, [7:29], pp. 2905-2916.
- Richardson, A. J. (2008). Organizational founding, strategic renewal, and the role of accounting: Management accounting concepts in the formation of the "penny post". *Journal of Management Accounting Research*, [20], pp. 107-127.
- Richardson, A. J., Kilfoyle, E. (2009). Accounting in markets, hierarchies and networks: The role of accounting in the transnational governance of postal transactions. *Accounting, Organizations and Society*, [34:8], pp. 939.
- Rossignoli, C., Ricciardi, F. (2015). *Inter-Organizational Relationships: Towards a Dynamic Model for Understanding Business Network Performance*. Switzerland: Springer International Publishing.
- Sargiacomo, M., Ianni, L., Everett, J. (2014). Accounting for suffering: Calculative practices in the field of disaster relief. *Critical Perspectives on Accounting*, [25:7], pp. 652-669

List of References

- Seal, W., Cullen, J., Dunlop, A., Berry, T., Ahmed, M. (1999). Enacting a European supply chain: a case study on the role of management accounting. *Management Accounting Research*, [10], pp. 303-322.
- Skærbæk, P., Tryggestad, K. (2010). The role of accounting devices in performing corporate strategy. *Accounting, Organizations and Society*, [35:1], pp. 108-124.
- Smith, J.A., Cordina, R. (2014). The role of accounting in high-technology investments. *The British Accounting Review*, [46:3], pp. 309-322.
- Sroka, W., Cygler, J. (2014). Pathologies in Inter-organizational Networks. *Procedia Economics and Finance*, [12], pp. 626–635.
- Stone, R. (1986). NOBEL MEMORIAL LECTURE 1984. *Journal of Applied Econometrics (1986-1998)*, [1:1], p.5.
- Swalhah, A. (2014). The role of accounting information systems (A.I.S.) in rationalized administrative decision- making (field study) jordanian banks. *Interdisciplinary Journal of Contemporary Research in Business*, [6:2], pp. 8-17.
- Sykianakis, N., Bellas, A. (2011). Organization politics and the role of accounting. *European Research Studies*, [14:3], pp. 119-133.
- The Economist** (2013) Here, there and everywhere. Special report: outsourcing and offshoring, The times, Jan 19th, Available online: <http://www.economist.com/news/special-report/21569572-after-decades-sending-work-across-world-companies-are-rethinking-their-offshoring>
- Thomson, I., Grubnic, S., Georgakopoulos, G. (2014). Exploring accounting-sustainability hybridisation in the UK public sector. *Accounting, Organizations and Society*, [39:6], pp. 453-476.
- Tian, Y., Zhou, H. (2015). From bottom line to consumers' mind: The framing effects of accounting information. *Accounting, Organizations and Society*, [43], pp. 56-66.
- Tomkins, C. (2001). Interdependencies, trust and information in relationships, alliances and networks. *Accounting, Organizations and Society*, [26], pp. 161–191.
- Trkman, P., McCormack, K. (2009). Supply Chain Risk in Turbulent Environments – A Conceptual Model for Managing Supply Chain Network Risk. *International Journal of Production Economics*, [119:2], pp. 247-258.
- Uddin, M.B. (2013). Techniques of interorganizational cost management: A review essay. *Journal of Statistics and Management Systems*, [16:1], pp. 89-108.
- Van der Meer-Kooistra, J., Vosselman E.G.J. (2000). Management control of interfirm transactional relationships: the case of industrial renovation and maintenance. *Accounting, Organizations and Society*, [25], pp. 51-77.
- Van der Meer-Kooistra, J., Vosselman, E.G.J. (2006). Research on management control of interfirm transactional relationships: whence and whither. *Management Accounting Research*, [17], pp. 227-237.

List of References

- Vergoossen, R. G. A.** (1993). The Use and Perceived Importance of Annual Reports by Investment Analysts in the Netherlands. *European Accounting Review*, [2], pp. 219-243.
- Williamson, O. E.** (1981), The economics of organization: the transaction cost approach. *The American Journal of Sociology*, [87:3], pp. 548-77.
- Williamson, O. E.** (1985). *The economic institutions of capitalism*. New York: The Free Press.
- Wilmshurst, T. D., Frost, G. R.** (2001). The role of accounting and the accountant in the environmental management system. *Business Strategy and the Environment*, [10:3], p. 135.
- Woodside, A.** (2010). *Case Study Research: Theory, Methods and Practice*. Howard House: Emerald Group Publishing Limited.
- Wright, M., Robbie, K.** (1996). Venture capitalists, unquoted equity investment appraisal and the role of accounting information. *Accounting and Business Research*, [26:2], p.153.
- Xu, L., Cortese, C., & Zhang, E.** (2014). Ideology diffusion and the role of accounting: A gramscian approach to understanding china's transition from 1949 to 1957. *Accounting History*, [19:4], pp. 434-451.
- Yasin, M. M., Bayes, P. E., Czuchry, A. J.** (2005). The changing role of accounting in supporting the quality and customer goals of organizations: An open system perspective. *International Journal of Management*, [22:3], pp. 323-331,507.
- Yin, R. K.** (1994). *Case Study Research: Design and Methods* [2nd ed.]. Thousands Oaks: Sage.
- Young, J. J.** (2006). Making up users. *Accounting, Organizations and Society*, [31], pp. 579- 600.
- Zhang, X.-J.,** (2005). Discussion of "conservatism, growth and the role of accounting numbers in fundamental analysis process". *Review of Accounting Studies*, [10:2-3], pp. 261-267.

Appendices

Appendix A

**Semi-structured interview guide**

**Introduction**

Can you shortly introduce yourself and the business/department/ position you are in?

What kinds of activities do you offshore? Why do you do offshore? Where do you do offshore? What were the reasons for the geographical location?

**Main part**

When you first started offshoring, how it was decided to control your offshore business? What were the reasons behind the chosen system of control? How did you/your company feel about controlling on the distance?

What type of relationship do you have with your vendor? Why have you decided to choose this type of relationship? Who/how this decision was made?

Subsidiary or joint venture: who manages and how?

What kind of relationships is between the managers?

How do they report? What do they report? (Type of information, form of report, to whom, frequency). Who makes the decision about what vendor should report about?

What kind of accounting you perform with your vendor?

What do you do with such information? How it can help to system of control? If not using such information, why do you not using it?

What is, in your opinion, the most important role for accounting information within the business relationship with your vendor? How can you use accounting information?

(Myths, legitimation, power, conflicts, delegation, evaluation)

**Concluding questions**

Why do you need accounting information for your business relationship in the future?

What do you think about to exchange accounting information in inter-organizational/with your vendor business relationships?

Thank you very much for the interview! We will contact you in case that we have further questions within the following weeks, will it be ok with you?

Appendix B

The following figure illustrates the different hybrid models between inter- and intra-organizational relationships.

	Inter-organizational ← Relationships continuum → Intra-organizational					
Williamson (1981)	Market			Hybrids		Hierarchy
Ellram (1991)	Transactions	Short-term contract	Long-term contract		Joint venture	Equity interest Acquisition
Lambert et al. (1996)	Arm's Length	Type I Coordination Short term Single function	Type II Integration Long-term Multiple functions	Type III Significant integration No end date Extension of own firm	Joint venture	Vertical integration
Spekman et al. (1998)	Open market negotiations Price based Adversarial	Cooperation Few Suppliers Long-term contracts	Coordination Information links WIP links EDI links	Collaboration Supply chain integration Joint planning Technology sharing		
Day (2000)	Transactional exchanges	Value-adding exchanges		Collaborative exchanges		
Burt et al. (2003)	Transactional	Collaborative		Alliance		

Figure 0-1: Illustration of the Relationships Continuum

(Mena et al., 2009:767)

**Appendix C**

Overview over the articles that are used for the structured literature review

**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Scholarly Journal Article	Martin Carlsson-Wall, Kalle Kraus	2015	Opening the black box of the role of accounting practices in the fuzzy front-end of product innovation	Industrial Marketing Management	Accounting practices in the fuzzy front-end of product innovation	Single case study	Ambition to develop a new theory	Sweden	Male	Inter-organizational
Scholarly Journal Article	Jill Hooks, Ross Stewart	2015	The changing role of accounting: From consumers to shareholders	Critical Perspectives on Accounting	The processes of accounting change as a State-sponsored consumer co-operative transformed to a private sector company pursuing profitability and value creation for shareholders	Historical case study	Institutional theory; Political economy of accounting	New Zealand and USA	Mixed	Intra-organizational
Scholarly Journal Article	Yan Tiana, Hui Zhou	2015	From bottom line to consumers' mind: The framing effects of accounting information	Accounting, Organizations and Society	How accounting information and message framing jointly impact consumer choice between brand name and generic drugs using a sample representative of the U.S. adult population.	Experiment		USA, Australia	Male	
Scholarly Journal Article	Naghshbandi, Nader; Ombati, Robert Mosomi; Khosravi, Vahid	2015	The Role of Accounting in Financial Crisis	Asia Pacific Journal of Management & Entrepreneurship Research	The current state of academic research articles related to the global financial crisis	Literature review		India	Male	National level
Scholarly Journal Article	Cornelia Beck, Glen Lehmanb	2014	On Gray, Malpas, and Brennan's "The role of social accounts: Situating political ideas"	Accounting Forum	The political ideas that emanate from Gray, Malpas and Brennan on the role of social accounts	Discussion		Australia	Mixed	
Scholarly Journal Article	Sarah Lauwoa, Olatunde Julius Otusanyab	2014	Corporate accountability and human rights disclosures: A case study of Barrick Gold Mine in Tanzania	Accounting Forum	Human rights dilemmas arising from investment initiatives of transnational corporations within the Tanzanian socio-political and economic context	Case study		UK, Nigeria	Mixed	
Scholarly Journal Article	Julia A. Smith, Renzo Cordina	2014	The role of accounting in high-technology investments	The British Accounting Review	The issues surrounding the usefulness of financial accounting to a specific type of investor; the venture capitalist.	Exploratory case study		UK	Mixed	
Scholarly Journal Article	Ian Thomson, Suzana Grubnic, Georgios Georgakopoulos Massimo	2014	Exploring accounting-sustainability hybridisation in the UK public sector	Accounting, Organizations and Society	The role of accounting in shaping and reshaping sustainability practices.	Comparative case study		UK, The Netherlands	Mixed	Intra-organizational
Scholarly Journal Article	Sargiacomoa, Luca Iannia, Jeff Everettb, Xu, Lina;	2014	Accounting for suffering: Calculative practices in the field of disaster relief	Critical Perspectives on Accounting	The role of accounting and other calculative practices in the context of a natural disaster and subsequent emergency-relief effort.	Case study		Italy	Male	Public utilities
Scholarly Journal Article	Cortese, Corinne; Zhang, Eagle.	2014	Ideology diffusion and the role of accounting: A gramscian approach to understanding china's transition from 1949 to 1957	Accounting History	The role of ideology diffusion in creating and maintaining Mao's political hegemony during the period 1949 to 1957	Literature review		Australia	Mixed	National level
Scholarly Journal Article	AyyoubAl Swalhah	2014	The role of accounting information systems (A.I.S.) in rationalized administrative decision- making (field study) jordanian banks.	Interdisciplinary Journal of Contemporary Research in Business	The role of Accounting Information Systems in rationalized Administrative Decision- making (field study)	Descriptive analysis (quantitative)		Jordan	Male	Intra-organizational



**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Scholarly Journal Article	Bolivar, Manuel Pedro RodriguezView Profile; Galera, Andrés NavarroView Profile; Muñoz, Laura Alcaide. Patrascu, Lucian; Bordeianu, Gabriela-Daniela; Radu, FlorinView Profile; Paraschivescu, Marius-Dumitru	2014	New development: The role of accounting in assessing local government sustainability.	Public Money & Management	The role of accounting in assessing the sustainability of local governments	Discussion		Spain	Mixed	Public utilities
Scholarly Journal Article		2014	Social and Cultural Functions of Accounting	Economy Transdisciplinarity Cognition	Functions of accounting for the society	Discussion		Romania	Mixed	Public
Scholarly Journal Article	Anne-Laure Farjaudon, Jérémey Moralesb	2013	In search of consensus: The role of accounting in the definition and reproduction of dominant interests	Critical Perspectives on Accounting	The role of accounting in the manufacture of consensus	Single case study		France	Mixed	Intra-organizational
Scholarly Journal Article	Gheorghe Claudiu Feies, Cristian Feies, Dorel Mates, Dumitru Cotlet	2013	The Role of Accounting Information within the Management Process of Public Utilities Services	Procedia - Social and Behavioral Sciences	the relevant role of the accountant information originated within the finance	Discussion		Romania	Male	Public utilities
Scholarly Journal Article	Jean Cushen	2013	Financialization in the workplace: Hegemonic narratives, performative interventions and the angry knowledge worker	Accounting, Organizations and Society	How the pressures of financialization were passed from top management to employees and achieved performative hegemony in a subsidiary of a knowledge intensive, high technology, multinational corporation.	Ethnographic case study		Ireland	Female	Intra-organizational
Scholarly Journal Article	Al-Moumany, Salam Nawaf; Al Ebbini, Mohannad Mohammad	2013	The Role of Accounting Information Systems (AIS) in Combating Tax Evasion	Interdisciplinary Journal of Contemporary Research in Business	Identification of the part taken by Accounting Information Systems (AIS) in combating tax evasion and preventive measures to tackle with tax evasion problem	Quantitative		Jordan	Male	Intra-organizational
Scholarly Journal Article	Ribeiro, Livia Maria de Pádua; Pereira, José RobertoView Profile; de Benedicto, Gideon Carvalho.	2013	The role of accounting in public governance process	African Journal of Business Management	Analysis of literature on accounting from the public governance context	Literature review		Brazil	Mixed	National level
Scholarly Journal Article	Kalle Kraus, Torkel Strömsten	2012	Going public: The role of accounting and shareholder value in making sense of an IPO	Management Accounting Research	IPO	Exploratory case study		Sweden	Male	Intra-organizational

**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Scholarly Journal Article	Elbayoumi, Ahmed F; Awadallah, Emad A	2012	Macro and Micro Earnings Manipulation: The Role of Accounting Standard Setting Process	GSTF Business Review	Utilization of the construct of power to reveal the influences from parties involved in the process of accounting standards setting	Discussion		Egypt, UK	Male	
Scholarly Journal Article	Kothari, S P View Profile; Lester, Rebecca	2012	The Role of Accounting in the Financial Crisis: Lessons for the Future	Accounting Horizons	The significant effects of these incentive structures and the role of fair value accounting standards during the crisis, and discuss implications and relevance of these rules to practitioners, standard-setters, and academics					
Conference Paper	Dinca Maria-Mihaela, Virag Nicolae Paul, Cotlet Bogdan Nikos	2012	The role of accounting information in the economic entity	Anale. Seria Stiinte Economice. Timisoara		Discussion		Romania	Mixed	Intra-organizational
Scholarly Journal Article	Sykianakis, Athanassios Bellas	2011	Organization Politics and the Role of Accounting	European Research Studies	Organization as an open political system	Discussion		Greece	Male	Intra-organizational
Scholarly Journal Article	Doinea, Ovidia; Lepadat, Gheorghe; Tomita, Vasile; Daniasa, Ionela.	2011	The role of accounting information in decision-making strategies	Economics, Management and Financial Markets	The linkages between the exploitation of inside information on capital markets, the integration of organizational information, the use of accounting information, the relationship between information asymmetry and cost of capital, and the computer-based aspects of an organization's information system	Discussion		Romania	Mixed	Intra-organizational
Working Paper	Marquardt, Carol; Zur, Emanuel.	2011	The Role of Accounting Quality in the M&A Market	Management Science	The role of target firms' accounting quality in the merger and acquisition (M&A) process.	Quantitative		USA	Male	Inter-organizational
Scholarly Journal Article	Peter Skærbæk, Kjell Tryggestad	2010	The role of accounting devices in performing corporate strategy	Accounting, Organizations and Society	The role of accounting in shaping corporate strategy	Ethnoaccountancy, ethnographic case study		Denmark	Male	Intra-organizational
Scholarly Journal Article	Leslie S. Oakes, Joni J. Young	2010	Reconciling conflict: The role of accounting in the American Indian Trust Fund debacle	Critical Perspectives on Accounting	Conflicted relations between American Indians and the federal government.	Discussion		USA	Female	Inter-organizational
Working Paper	Ahmed, Anwer S.; Duellman, Scott	2010	Evidence on the Role of Accounting Conservatism in Monitoring Managers' Investment Decisions	Social Science Research Network	Accounting conservatism	Quantitative		USA	Male	Intra-organizational
Scholarly Journal Article	Beatty, Anne; Liao, W Scott; Weber, Joseph	2010	The Effect of Private Information and Monitoring on the Role of Accounting Quality in Investment Decisions	Contemporary Accounting Research	Private information, and the role of accounting quality in reducing the investment-cash flow sensitivity	Modelling Quantitative		USA, Canada	Mixed	Inter-organizational
Scholarly Journal Article	Alan J. Richardson, Eksa Kilfoyle	2009	Accounting in markets, hierarchies and networks: The role of accounting in the transnational governance of postal transactions	Accounting, Organizations and Society	The changing role of accounting in the development of the international postal system between 1840 and the emergence of the Universal Postal Union (UPU) in 1875	Longitudinal case study	Transaction Cost Economics	Canada	Male	Intra-organizational
Working Paper	Pranatio, Edwin; Hutagaol, Yanthi	2009	Revisited: The Role of Accounting Information of LQ45 Firms on Equity Valuation After the Asian Economic Crisis	Social Science Research Network	Revisiting of the role of accounting information on equity valuation after the Asian economic crisis	Quantitative		Indonesia	Male	

**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Scholarly Journal Article	Ekanayake, Athula; Perera, Hector; Perera, Sujatha	2009	Towards a Framework to Analyse the Role of Accounting in Corporate Governance in the Banking Sector	Journal of Applied Management Accounting Research	The role of accounting in corporate governance with special reference to the banking sector	Literature review	Agency theory, stakeholder theory and contingency theory	Australia	Mixed	
Working Paper	Kartalis, Nikos; Athianos, Stergios	2009	The role of accounting control systems in the four show caves in greece	Social Science Research Network	Examination of how accounting informs decision making in the Greek show caves	Case study	Neoinstitutional theory	Greece	Male	Intra-organizational
Scholarly Journal Article	Frédéric Compin	2008	The role of accounting in money laundering and money dirtying	Critical Perspectives on Accounting	The processes involved in the misapplication of accounting knowledge from the angle of financial crime.	Discussion		France	Male	Inter-organizational
Scholarly Journal Article	Sinikka Moilanen	2008	The role of accounting and an intermediate subsidiary in the management control system	Management Accounting Research	Management control system of a multinational corporation	Case study		Finland	Female	Intra-organizational (Multinational company)
Scholarly Journal Article	Moilanen, Sinikka	2008	The role of accounting in the management control system: a case study of a family-led firm	Qualitative Research in Accounting and Management	The formation of social positions and power of individuals and their effects on the role of accounting in the development of management control systems (MCSs)	Case study	Institutional theory	Finland	Female	Intra-organizational (Multinational company)
Scholarly Journal Article	Huefner, Ronald, Largay, James A, III	2008	The role of accounting information in revenue management	Business Horizons	Revenue management	Discussion		USA	Male	
Trade Journal	Druml, David F.	2008	The role of accounting in assessing construction risk	Construction Accounting & Taxation Journal of Management Accounting Research	Accounting-related risk factors	Discussion		USA	Male	Intra-organizational
Scholarly Journal Article	Richardson, Alan	2008	Organizational founding, strategic renewal, and the role of accounting: Management accounting concepts in the formation of the "penny post"	Journal of Management Accounting Research	Analysis of Hill's logic from the perspective of current management accounting techniques and terminology.	Discussion		UK	Male	Intra-organizational
Scholarly Journal Article	Abu Kasim Nor-Aziah, Robert W. Scapens	2007	Corporatisation and accounting change The role of accounting and accountants in a Malaysian public utility	Management Accounting Research	in-depth analysis of a Malaysian public utility which was required to transform itself into a self-financing, efficient and profitable organisation through a process of corporatisation	Explanatory case study	Institutional theory	UK, Malaysia, The Netherlands	Male	Intra-organizational
Scholarly Journal Article	Pettersen, Inger-Johanne; Solstad, Elsa. Carter, Mary Ellen	2007	The role of accounting information in a reforming area: a study of higher education institutions	Financial Accountability & Management	The role of budgets and accounting information in the public sector tertiary education institutions in a particular context.	Case study		Norway	Female	Intra-organizational
Scholarly Journal Article	Profile; Lynch, Luann JView Profile; Tuna, IremView Profile.	2007	The Role of Accounting in the Design of CEO Equity Compensation	The Accounting Review	The role of accounting in CEO equity compensation design	Sample / Quantitative research		USA	Female	Intra-organizational
Trade Journal	Brewer, P. C., & Kennedy, F. A.	2006	Motivating lean behaviour: The role of accounting	Cost Management	Lean Behaviour	Discussion		USA	Male	
Scholarly Journal Article	Holmes, S. A., Welch, S. T., & Knudson, L. R.	2005	The role of accounting practices in the disempowerment of the Coahuiltecan Indians	The Accounting Historians Journal	Accounting measures at five Franciscan missions along the San Antonio River in New Spain 1718-1794	Historical case study		USA	Female	

**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Scholarly Journal Article	Yasin, M. M., Bayes, P. E., & Czuchry, A. J	2005	The changing role of accounting in supporting the quality and customer goals of organizations: An open system perspective.	International Journal of Management	The accounting subsystem in the context in the context of the open system business model	Discussion		USA	Male	Intra-organizational
Scholarly Journal Article	Jacobs, K.	2005	The sacred and the secular: Examining the role of accounting in the religious context.	Accounting, Auditing & Accountability Journal	The role of accounting in a religious setting	Discussion		Australia	Male	
Scholarly Journal Article	Arya, A., Glover, J., Mittendorf, B., & Zhang, L.	2004	The disciplining role of accounting in the long-run.	Review of Accounting Studies	The role of accounting in disciplining softer information	Quantitative	Agency theory	USA	Mixed	Inter-organizational
Working Paper	Leuz, C., & Wüstemann, J.	2003	The role of accounting in the german financial system	Social Science Research Network	Comparison between the informative role of accounting in the German financial system and Anglo-American financial systems	Literature review	Institutional theory	USA, Germany	Male	National level
Scholarly Journal Article	Monir, Z. M., & Abu, S. R.	2003	The role of accounting in the enterprise bargaining process of an australian university	Accounting, Auditing & Accountability Journal	Provides emprirical evidence for a conflict-enhancing role of accounting	Case study	Amernic and Craig's (1992) framework on "employer equivocality and union heterogeneity" Environment-related management accounting	Australia, Canada	Male	Intra-organizational
Scholarly Journal Article	Wilmshurst, T. D., & Frost, G. R.	2001	The role of accounting and the accountant in the environmental management system	Business Strategy and the Environment	Roles that accounting and the accountant might have in the development and execution of an EMS	Sample / Quantitative research		Australia	Male	Intra-organizational
Scholarly Journal Article	Alan D. Lowe	1997	The role of accounting in the processes of health reform: providing a 'black box' in the costing of blood products	Management Accounting Research	The role of accounting during the public health reform in New Zealand: the provision of a basic costing system for blood products	Case study		New Zealand	Male	Intra-organizational
Scholarly Journal Article	Margaret A. Abernethy, Peter Brownell	1997	Management control systems in research and development organizations: The role of accounting, behavior and personnel controls	Accounting, Organizations and Society	Contributions of both accounting- and non-accounting-based control systems to the effectiveness of the company	Case study	Perrow's model of technology and structure	Australia	Mixed	Intra-organizational
Scholarly Journal Article	Mike Wright & Ken Robbie	1996	Venture capitalists, unquoted equity investment appraisal and the role of accounting information	Accounting and Business Research	Discussion of the information that is used for decision-making of venture capitalists	Case study	Agency theory	UK	Male	Inter-organizational
Scholarly Journal Article	Oldroyd, D.	1995	The role of accounting in public expenditure and monetary policy in the first century AD roman empire	The Accounting Historians Journal	The role of accounting during the roman empire	Literature and Epigraphic Study		UK	Male	National level
Scholarly Journal Article	Amernic, J., & Craig, R.	1992	Employer equivocality and union heterogeneity as determinants of the role of accounting in collective bargaining	Accounting, Auditing & Accountability Journal	The role of accounting in bargaining processes: "an excuse for interaction"	Case study	Amernic and Craig's (1992) framework on "employer equivocality and union heterogeneity"	Canada, Australia	Male	Intra-organizational
Scholarly Journal Article	Pike, R., Sharp, J., & Kantor, J.	1988	The role of accounting information in valuing unlisted shares	Accounting and Business Research	The role of accounting information for the valuation of unlisted shares by professionl accountants	Quantitative		UK	Male	Inter-organizational

**Structured Literature Review**

Source Type	Authors	Year of Publication	Source Title	Name of the Journal/Publisher	Focus of the study	Methodology	Frame of Reference	Researcher Location	Gender of the Researcher	Inter- vs Intra-Organizational relations
Lecture	Stone, R.	1986	Nobel Memorial Lecture 1984	Journal of Applied Econometrics (1986-1998)	The importance of accounting for the society	Case study		UK	Male	National level
Scholarly Journal Article	Stuart Burchell, Colin Clubb, Anthony Hopwood, John Hughes	1980	The roles of accounting in organizations and society	Accounting, Organizations and Society	Contrast of the roles that have been claimed on behalf of accounting with the ways in which accounting functions in practice	Literature review		UK	Male	
Scholarly Journal Article	Anonymous	1974	The role of accounting	The CPA Journal (Pre-1986)	How accountants can assist the society in making objective decisions	Discussion		USA	Unknown	National level
Scholarly Journal Article	Goetz, B. E.	1974	The role of accounting in helping small business remain solvent.	Journal of Small Business Management (Pre-1986)	The role of accounting for the successful management of small businesses	Discussion		USA	Male	Intra-organizational
Scholarly Journal Article	Joplin, B.	1970	What business are we in? information!	Management Accounting (Pre-1986)	The role of accountants in the enterprise	Discussion/Case study	Information theory	USA	Male	Inter-organizational
Scholarly Journal Article	Linowes, D. F.	1969	The role of accounting in emerging nations	Journal of Accountancy (Pre-1986)	Accounting and planning in emerging nations	Discussion		USA	Male	National level
Scholarly Journal Article	Fess, Philip E; Holzer, H Peter	1964	The diverse functions of accounting	Journal of Accountancy (pre-1986)	The historical and interpretative function of accounting data	Discussion		USA	Male	Public
Scholarly Journal Article	Neuner	1962	The role of accounting in decision making	Journal of Accountancy (Pre-1986)	Courses of management to increase profits	Discussion		USA	Male	Intra-organizational
Scholarly Journal Article	Camman, Eric A.	1947	An outline of the functions of accounting in industrial management	Journal of Accountancy (pre-1986)	Alignment of the major areas of management with the functions of accounting in these areas	Overview		USA	Male	Intra-organizational