



UNIVERSITY OF
NORDLAND

BODØ GRADUATE SCHOOL OF BUSINESS

MASTER THESIS

Materiality threshold in the software development industry:

A comparative study of two organizations

in Norway

by Kuznetsov Nikita

BE304E Management control

May, 2015



Sammendrag

Denne empirisk-basert forskningen analyserer kvalitative faktorer, kvantitative betrakninger og tilnæringsmåter for å etablere vesentlighetsgrense som er brukt hos eksterne revisorer, ledere, styreledere og regnskapsførere. Denne masteroppgaven er basert på følgende problemstilling: hvilke karakteristiske av vesentlighetsgrense er understrekket ved faglig persjone som er involvert i prosessen av vesentlighetsetablering eller vurdering? Denne studien bruker komparativ case som forskningdesign. Her sammenligner jeg som forsker to programvareutviklingselskaper og to revisjonsselskaper som er lokalisert i Bodø. Jeg som forsker gjennomførte sju semistrukturerte dybdeintervjuer.

I denne oppgaven sammenligner jeg perspektiver som jeg har fått av informantene for å se på hvordan vesentlighetsgrense forbedrer ansvarligheten til disse individene. I tillegg analyserer jeg vesentlighetgrense fra perspektive av betingede variabler. Resultatene viser at det er både forskjeller og likheter mellom meninger til informantene og oppfatninger deres om vesentligheten av regnskapsprinsiper. Dessuten har alle informantene understreket at vesentlighet forbedrer den profesjonelle ansvarligheten. Som forsker har jeg oppnådd praktiske bidrag og har identifisert både teoretiske og praktiske gap, som akademiker og forskere kan bruke for å studere andre aspekter av regnskapsvesentligheten.

Nøkkelord: vesentlighet, regnskap, revisjon, ansvarlighet, økonomistyring.

Abstract

This empirical- based study examines qualitative aspects, quantitative considerations and approaches used to establish materiality, which are considered by external auditors, management personnel, board of director's members and professional accountants. This master thesis is based upon the following problem statement: "What characteristics of materiality are emphasized by professionals, which are involved in the process of materiality establishment or evaluation?" The study utilizes a comparative case study research design and thus involves comparison of two software-development organizations that operate in Bodø, Norway as well as their audit firms. The research is based mainly on one primary source of data: semi-structured in-depth interviews.

In this master thesis the researcher compares perspectives of the respondents in order to determine, what role materiality threshold plays in enhancing accountability of these individuals. The study also analyzes materiality threshold from perspective of contingency theory. The results have shown that there are both differences and similarities between the respondents opinions and perceptions on accounting materiality. Additionally all respondents emphasized the role of materiality in enhancing their professional accountability. The researcher has achieved practical contributions and indentified both theoretical and practical gaps that can be used by other academics and researchers in order to study other aspects of materiality threshold.

Keywords: materiality threshold, accounting, auditing, accountability, management control.

Acknowledgements

I would like to express my deepest gratitude towards my supervisor- Associate Professor Levi Gårseth-Nesbakk for being extremely supportive and providing me with highly professional guidance throughout the whole time which I have spent writing this master thesis. His attitude towards high quality work will motivate me for a long time after I graduate from Bodø Graduate School of Business at the University of Nordland.

At the same time I would like to thank the management control staff and in particular Associate Professor Anatoli Bourmistrov for motivating me to choose this study path. That was a fascinating experience!

Additionally, I would like to express my thanks to the interviewees, who were included in this empirical study. Even though, for anonymity reasons I cannot write your names, I highly respect your level of professionalism. I am grateful for the possibility that you have provided me with so I could learn more about your organizations.

Lastly, I would like to thank my entire family for always being there and trying to do everything what they can in order to help me. Without your support I would not be able to complete this project.

List of acronyms

AICPA- American Institute of Certified Public Accountants

CPA- Certified Public Accountant

FASB- Financial Accounting Standards Board

FRC- Financial Reporting Council

IAASB- International Auditing and Assurance Standards Board

IASB- International Accounting Standards Board

IFRS- International Financial Reporting Standards

ISA 320- International standard on auditing 320

ISA 450- International standard on auditing 450

NOK- Norwegian Kroner

SAS- Statement on Auditing Standards

SEC- U.S. Securities and Exchange Commission

Table of contents

Sammendrag	i
Abstract.....	ii
Acknowledgements	iii
List of acronyms.....	iv
Table of contents	v
1. Introduction	1
1.1. Description of a problem.....	1
1.2. Problem statement	4
1.2.1. Conceptual clarifications.....	4
Professionals.....	5
Characteristics of materiality.....	5
External auditor	6
Insiders.....	6
Accounting information	7
1.3. The purpose of the master thesis	7
1.4. The structure of the master thesis	7
2. Theoretical framework	9
2.1. Materiality of accounting information	9
2.1.1. Qualitative characteristics of accounting information.....	14
2.2. Accountability	17
2.2.1. Types of accountability.....	18
Public accountability.....	18
Managerial accountability	19
Professional accountability.....	21
Personal accountability	22
2.3. Contingency theory.....	23
External environment.....	23
Technology.....	23
Organizational structure	24
Size	24
Strategy	24
Culture	24
2.4. Summary of the theoretical framework.....	24
3. Methodology.....	25
3.1. Philosophical assumptions underlying the research.....	25
3.2. Research design.....	26
3.2.1. Rationale for the choice of the research design	26
3.2.2. Constituent elements of the research design.....	29
3.2.3. Units of analysis	31
3.2.4. Anonymity	32
Respondents table	33
3.2.5. Interviewees working experience and responsibilities.....	34
MAN1	34
AUD1	34
MAN2	34
AUD2.....	34
CEO2	34
BODM2	34
ACC2	35
3.3. Data collection- In-depth interviews.....	35
3.3.1. Preparation for the interviews	36
3.3.2. How the interviews were conducted.....	37
3.3.3. Limitations during data collection process.....	38
3.4. Data analysis	39

3.5. Addressing quality concerns of research: validity and reliability	39
3.5.1. Construct validity	39
3.5.2. External validity	40
3.5.3. Reliability.....	40
3.6. Summary.....	41
4. Description of empirical cases	41
4.1. Information sector in Norway	41
4.2. Description of selected organizations	42
4.2.1. Case 1: ORG1 and AORG1	42
4.2.2. Case 2: ORG2 and AORG2	43
5. Empirical findings.....	43
5.1. Insider's perspective	44
5.1.1. The process of materiality establishment	44
Various materiality limits for different accounting statements	44
Matching accounting information in order to detect material misstatements	44
Establishment of materiality as a continuous process	45
Materiality discussions with the professional accountant.....	46
Materiality discussions with the external auditor.....	47
5.1.2. Quantitative factors that affect materiality	49
Effect on income.....	49
Effect on transactions with customers.....	50
Accrual accounting items	50
Size of accounting item.....	51
Financial ratios or key numbers to determine materiality	51
5.1.3. Qualitative factors that affect materiality.....	51
Insider's personal characteristics and experience	51
Knowledge about enterprise, its activities and employees	53
Risk assessment.....	54
Opinions of management, professional accountant and external auditor	54
Laws and regulations	55
Product sales.....	55
Information from other organizations.	56
Board of directors and department leaders	57
General considerations on discretionary items	58
IAS 38:57 Development phase	59
Accounts receivable	60
Depreciation of intangible assets	62
5.2. External auditor's perspective	64
5.2.1. The process of materiality establishment	64
Materiality manuals and guidelines	64
Materiality threshold as a part of organizational corporate secrecy	65
Benchmarking materiality threshold	65
Continual vs. fixed materiality establishment.....	66
Materiality assessment from the user's point of view	66
Materiality discussions with management.....	67
5.2.2. Quantitative factors that affect materiality	69
Size of the entity and average earnings in the industry	69
5.2.3. Qualitative factors that affect materiality.....	70
External auditor's personal characteristics	70
Knowledge about enterprise, its activities and employees	70
Risk assessment.....	71
Incentives to misinterpret information	72
Type of ownership in audited organization	72
Acquisition candidate.....	72
Economic environment	73
Tax authorities.....	73
External and internal users	74
Users that require lower materiality	74
General considerations on discretionary items	75
IAS 38:57 Development phase	76
Depreciation of intangible assets	77
5.3. Summary of empirical findings.	78
6. Discussion	78

6.1. Role of materiality characteristics in enhancing accountability.....	78
6.1.1. Insider’s perspective	79
Public accountability of the insiders	79
Managerial accountability of the insiders.....	80
Professional accountability of the insiders	80
Personal accountability of the insiders.....	83
6.1.2. External auditor’s perspective	84
Public accountability of the external auditors.....	84
Managerial accountability of the external auditors.....	85
Professional accountability of the external auditors.....	86
Personal accountability of the external auditors	89
6.1.3. Comparing aspects of accountability	89
Comparing public accountability.....	89
Comparing managerial accountability.....	90
Comparing professional accountability.....	90
Comparing personal accountability.....	92
6.2. Contingent variables and materiality characteristics.....	92
External environment.....	92
Technology.....	93
Organizational structure	94
Size	94
Strategy	94
National culture	95
6.3. Summary of the discussion chapter	95
7. Conclusion.....	95
7.1. Implications, limitations and further research suggestions.....	97
8. References:	100
Appendix 1: Interview guides	105
Board of directors.....	105
Professional accountant	106
Management personnel.....	107
External auditors	108

Survey of figures

Figure 1: Constituent elements of materiality	10
Figure 2: Materiality characteristics	13
Figure 3: The qualitative characteristics of accounting information.....	15
Figure 4: Embedded research design of particular multiple-case study	30
Figure 5: Indexed growth in turnover of various segments in information sector	42

Survey of tables

Table 1: Respondents table	33
----------------------------------	----

1. Introduction

1.1. Description of a problem

As stated by the Financial Accounting Standards Board information, disclosed in financial reports should provide sufficient and reasonable basis for users of accounting information so they could make economic and business decisions. It is known that there are different users of accounting information with both direct and indirect interest and which are located inside the organization or outside of it. (FASB, 2008a) To make information useful for the stakeholders in and around organization it should maintain certain qualitative characteristics. For instance accounting information should be understandable, comparable with other external financial reports in organizations in a similar context and should be fit for decision-making processes. It also should be reliable and fulfill its conventional purpose as well as it has to maintain certain degree of relevance or in other words it should influence decisions of information user. (Riahi-Belkaoui, 2004)

These properties and characteristics of information, disclosed in financial reports are affected by the so-called “materiality threshold”- a concept that describes the extent of omission or misstatement in financial report that would influence judgment of a reasonable decision-maker. (FASB, 2008b). Materiality as a concept includes both quantitative and qualitative factors that vary between individuals. For instance Securities and Exchange Commission considers a misstatement as a 10 percent of the revenue. (Epstein, Nach and Bragg, 2006). However Vorhies (2005) explains that Certified Public Accountants commonly use a threshold of 5 percent in relation to organizational income in order to determine whether misstatement can be considered as material or not. Moreover, according to Epstein and Jermakowicz (2007:735) some IFRS do require that material information should be included in financial reports, however they do not provide any specific guidance on how this should be done and the individual, which evaluates materiality in particular case has to bear the burden of responsibility of its reasonable establishment.

Vorhies (2005) also stated that accounting information cannot be considered as material or immaterial by simply using a numerical border and there are several qualitative factors that shape the judgment of CPA. For instance CPA’s have to conduct a qualitative analysis to determine whether a misstatement has consequences for decision-makers and whether these consequences can be considered as material or not. This would mean that the process of materiality establishment varies depending on several qualitative factors such as environmental circumstances, types of users of accounting information and judgment of a person, responsible

for decision-making. This information was confirmed by Iskandar and Iselin (2000:7), who reviewed several empirical studies on this topic and concluded that materiality is affected by personal characteristics and social environment. Moreover authors suggested that it was necessary to develop more structured materiality guidelines, which could be used by preparers and auditors otherwise these participating parties can develop different materiality thresholds for the same accounting information. These differences certainly have a negative impact on financial reports comparability, while analyzing accounting information from two or more organizations. In another empirical study conducted by Pany and Wheeler (1989) it is underlined that Statement on Auditing Standard (SAS) No. 47 “ Audit risk and Materiality in Conducting Audit”, which is currently in effect requires pre-establishment of materiality threshold for financial reports and at the same time does not give any specific criteria on how this process should be conducted. This resulted in creation of several common techniques by external auditors on how to establish materiality of accounting information, focusing on impact of the misstatement or omission either on net income, gross profit, total assets, total revenue, equity or size of the entity. This information is confirmed by Chewning and Higgs (2000), who also add the nature of the item, current or working capital effect and return-on-investment to this list of quantitative methods used to establish materiality. Pany and Wheeler (1989) continue that the choice between these estimates is a matter of judgment, which is based on personal experience of external auditor and the type of industry where audited organization operates.

This vagueness and lack of clear-cut criteria for materiality evaluations can be a reason of distortion of accounting information and can result in abuse of materiality as a concept by related parties in their own interests to portray financial statement in a fraudulent manner. For instance wrong evaluation of materiality is often used to manage earnings. Organizations that are often required to meet a certain earnings target can adopt liberal materiality standards, which will be tolerated by external auditor thus allowing “the breach of rules”. (Terry-Grant et al., 2000:44) At the same time if these qualitative criteria, which are used to establish materiality threshold will remain undetermined and will not be specified for every industry even a reasonable manager or auditor might be unable to establish correct materiality that will not falsify the true and fair view of financial reports and this will have a negative impact on stakeholders that are affected by external reporting.

Subjective nature of materiality has been a highly debated topic in accounting literature for more than fifty years. For instance Bernstein (1967:89) discussed qualitative aspects of materiality and described it as an “elusive matter”. He also underlined that judgment of a person is largely influenced by his or her personal interpretation and perception of what is “true and fair representation” of accounting information. He emphasized that these subjective evaluations have

a negative influence on comparability of financial reports as well as on determination of quality of accounting information. In his empirical investigation Frishkoff (1970) underlined that even though materiality threshold should have its main focus on the users of accounting information, the main issue with this approach in practice is that sometimes it can be difficult to determine who are these interested parties and what level of knowledge do they obtain, while analyzing information obtained from financial reports. Rose, Beaver, Becker and Sorter (1970) stated that the definition of materiality is vague and factors that influence decision-makers remain undetermined and tried to determine them and their significance quantitatively.

Later in the article by Holstrum and Messier (1982:48) a large problem was outlined, which was related to subjectivity of materiality- preparers, auditors and users of accounting information are most likely to have different views on materiality threshold, because of their different incentives. In particular users of accounting information are commonly interested in lower materiality threshold than preparers, whereas materiality threshold of external auditors usually lies in-between.

More than twenty years later Messier, Martinov-Bennie and Eilifsen (2005) summed up a significant portion of materiality research subsequent to 1982. All reviewed studies were segregated into three large groups: studies of auditor-related sources, which included studies of audit manuals and audit working papers; studies, which focus on analysis of publicly available resources and experimental studies, which are aimed at providing understanding of personal views of management, CPA's, external auditors, partners audit committee members and other stakeholders, which are affected by the way how the materiality of financial statement has been established. A distinct sub-group of experimental studies is the body of research that is based on comparative methodology. However studies included in the review focus on comparison of auditors, lawyers and users opinions and do not include preparers of accounting information as a comparative group. (Messier, Martinov-Bennie and Eilifsen, 2005:175)

The main findings, obtained from review of these studies are that materiality is established differently by different firms and these processes are highly dependent on subjective judgment of a preparer of accounting information. (Messier, Martinov-Bennie and Eilifsen, 2005:163) It was as well stated that even though net income continues to be the most significant quantitative factor, both preparers of accounting information and auditors take into account different qualitative factors, which seem to affect the judgment on materiality. The materiality threshold seems to vary greatly depending on experience and type of organization. (Messier, Martinov-Bennie and Eilifsen, 2005:181)

As suggested by Messier, Martinov-Bennie and Eilifsen (2005:182) there are different areas that remain opened for exploration, which could provide a better understanding of

materiality concept. For instance there is still a degree of uncertainty concerning the way materiality threshold is established by organizations and audit firms and what methods and techniques they apply. It was as well suggested to conduct more research on what informational basis do they use for materiality evaluations and whether or not they base their analysis solely on mechanical and quantitative analysis and if not then, what qualitative factors do they consider and how these factors affect the process of materiality establishment and perception of users of accounting information.

Therefore an empirical-based research, which could determine how materiality limit in certain industry is established and what quantitative and qualitative criteria are used for its assessment would contribute to academic development of this area. Moreover results obtained from such kind of study can be used as a historical precedent by external auditor or by top-management during negotiations of whether or not certain accounting information can be considered as material or not as well as a justification of results, presented in financial statement.

1.2. Problem statement

Based on the reasoning from the previous section the researcher decided to develop the following problem statement:

What characteristics of materiality are emphasized by professionals, which are involved in the process of materiality establishment or evaluation?

To address the aforementioned problem statement the researcher has decided to focus on providing answers to following research questions:

- a. What characteristics of materiality do external auditors emphasize, while assessing materiality threshold of accounting information?
- b. What characteristics of materiality do insiders of audited organization emphasize, while assessing materiality threshold of accounting information?

1.2.1. Conceptual clarifications

This part of the research is aimed at providing clarifications of the following terms stated in the research questions.

Professionals

While referring to the term “professional” the researcher implies individuals that are related to the process of preparing accounting information and its communication towards users. This term includes both the insiders and the external auditors, which were mentioned in the research questions “a” and “b”. According to FASB’s Statement’s of Financial Accounting Concepts No.1 “Objectives of Financial Reporting by Business Enterprises”, while preparing and communicating financial information accounting professionals should provide final users with all necessary information for decision-making purposes. (FASB, 2008a)

Characteristics of materiality

By the term “materiality characteristics” the researcher implies process of materiality establishment, quantitative circumstances that affect materiality and qualitative factors that impact this concept.

According to the IAASB (2009a:314) judgments on materiality are made taking into consideration surrounding factors. The researcher assumes that these surrounding circumstances can be divided into quantitative and qualitative factors that affect materiality of accounting information. According to Securities and Exchange Commission (1999) certain auditors and preparers of accounting information have developed their own quantitative “rules of thumb” in order to determine materiality. However, heavy reliance on quantitative considerations can lead to distortion of true and fair view of accounting information and therefore preparer of accounting information and independent auditor have to take into consideration qualitative factors that affect materiality (Securities and Exchange Commission, 1999). According to Statement on Auditing Standards #312 “Audit risk and materiality in conducting audit” qualitative factors that affect materiality threshold are defined as aspects that are considered relevant by external auditor during his or her assessment of certain misstatements in accounting information as material or not. Essentially similar concerns were provided by Securities and Exchange Commission’s Staff Accounting Bulletin 99 “Materiality”, where it was stated that qualitative factors, which influence materiality considerations can impact auditor’s and preparers judgment in situation, where from quantitative point of view misstatement seems to be immaterial. (Securities and Exchange Commission, 1999).

As stated in the Statement on Auditing Standards #312 “*Audit risk and materiality in conducting audit*” “the determination of what is material to the users is a matter of professional judgment” (AICPA, 2006:1654). Relying on this information the researcher aims to investigate whether or not there are any differences and similarities between the professionals that are directly or indirectly related to the process of materiality establishment.

External auditor

According to Soltani (2007:102) external auditor is a professional individual, who is responsible for the auditing process of the organizational financial reports in accordance with auditing standards. His or her main responsibilities are providing an official note with his or her expert opinion about current status of financial reports as well as assessing risk and control environment. External auditor is also obliged to provide suggestions aimed to improve the process of financial report preparation. In context of this research by the term “external auditor” the researcher implies an employee or partner, who is directly related to the audit firm selected for this study and who through either direct or indirect working responsibilities is related to external audit process of organizations included in the study. Chosen external auditor should possess deep knowledge of materiality threshold policies that are applied in particular audit firm.

Insiders

By the term “insiders” the researcher implies management personnel, board of directors and professional accountant that is those professionals that share joint interests in establishing materiality of accounting information.

Relying on information from Soltani (2007:78) board of director’s member can be described as an organizational entity, which is responsible for the determination of the overall organizational policies and actions that can impact organizational strategy, internal and external environment. Board of directors member is also responsible to monitor management performance as well as performance of organization in general.

As stated by Soltani (2007:102) management personnel involved in the preparation process of financial statement should be responsible for design, implementation, maintenance and communication of information included in financial reports. In case of this particular study by the term “management” the researcher implies specific type of management personnel in software-development organizations, who through his or her responsibilities is related to the preparation of financial statements and to the process of materiality establishment. The manager should obtain a deep knowledge and understanding about accounting materiality and its evaluation in particular organization.

According to the FASB’s Standard on Financial Accounting Concepts No. 1 (2008a:7) organizational financial statements can be verified or prepared by professional accountant, which works either internally in the organization that prepares financial reports or can be hired by an organization from professional accountant firm. The verification of financial statement is

conducted in order to increase reliability of this accounting information. In both cases professional accountant works on behalf of the organization that hired him or her, while preparing financial information for them and thus can be considered as an insider as well.

Accounting information

As stated in Bloomfield (2008:434) one can view accounting information as a language and thus as a mean of communication that changes because of “variety of forces”, which exist in and around organization. This notion is supported by Mellemvik et al (1988:104), who suggested that accounting has a set of “language-like” features and is made in order to provide a better understanding of social processes that occur in and around organization and of the world in general. In particular case of this research by the notion “accounting information” the researcher implies information, which is included in external financial reports as well as information, which is used for internal reporting.

1.3. The purpose of the master thesis

While conducting this master thesis the researcher aims at receiving both theoretical and practical insights into scientific and investigative methods. This will allow developing practical skills that can be used by the researcher later on throughout his working experience. By completing this master thesis the researcher aims to acquire more practical skills such as conducting required amount of work in a limited time frame as well as writing academically. The researcher also aims at gaining insight into the choice of theories for the research questions as well as the choice of an appropriate methodology, which will be used by the researcher in order to gather necessary data and later on in the discussion chapter of this study.

1.4. The structure of the master thesis

The purpose of this master thesis is to determine the characteristics of materiality that are emphasized by preparers of accounting information as well as by external auditors. Empirically this master thesis focuses on one industry, namely software-development industry in Norway. This master thesis is structured in the following way:

Introduction chapter provides the reader with an overall description of the topic. It contains theoretical and practical rationale of the problem and explanation of necessity of this research and its expected contribution. In addition to that this chapter includes research questions and conceptual clarifications that are aimed at forming correct interpretation and

understanding of certain terms, which are included in the research questions. In the frame of reference chapter materiality as a theoretical concept is outlined as well as views of the researcher on the materiality characteristics that affect materiality decisions. At the same time this chapter provides an overview on the accountability, principal-agent theory and other theories that are used in the discussion part of the research. Methodological chapter contains philosophical assumptions of chosen research method, as well as research design and its constituent elements such as units of analysis, data collection methods, methods and techniques, which are used to analyze received data, overall structure of the research as well as description of analysis. Empirical chapter has its central focus on description of software development industry. At the same time it includes description of empirical cases, chosen for this comparative study. Empirical chapter also includes the main findings obtained during the process of data collection. Discussion chapter of this research consists of an analysis of received information and involves comparison of the findings obtained from the data collection between two software development organizations as well as application of the theories outlined in the previous chapter of the research, in order to gain a better understanding of materiality threshold.

The findings of the research and analysis are summarized in the conclusion chapter. Furthermore it includes possible suggestions how these results can be utilized by the insiders in the software- development industry as well as by the external auditors. At the same time after reading conclusion reader will be informed about theoretical contribution, which is made by the researcher, other areas, which are currently open for exploration and limitations of this study that affect its validity and reliability.

1.5. Limitations

As stated in the problem statement the researcher aims at investigating what are the materiality characteristics emphasized by the professionals that are involved in the process of materiality establishment and evaluation. It is known that there are other entities and individuals that participate in the process of materiality establishment and evaluation. However, due to time constraint and lack of human resources the researcher has decided to focus only on the entities listed in the research questions, namely insiders and external auditors.

The researcher is still uncertain, whether or not he has chosen a sufficient number of cases that can provide him and the reader with a holistic overview over the materiality characteristics. However, as emphasized earlier due to time constraint, lack of human resources and uncertainty with access researcher has decided to focus only on the minimum amount of cases, which are required for the comparative case study.

2. Theoretical framework

The following sections, which describe materiality threshold as well as qualitative characteristics of accounting information, are partly based on the researcher's project work.

2.1. Materiality of accounting information

Accounting plays a significant role in development of the mankind. Today accounting is utilized by different groups of stakeholders in and around organizations namely customers, management, external auditors, professional accountant firms, financial analysts, labor unions, trade associations, business researchers and others. (FASB, 2008a:8) Many of these professionals, who are involved into the process of preparation and verification of financial statements and internal reports as well as those individuals and organizations that base their economic, investment and strategic decisions on information from financial reports consider accounting as an objective representation of reality. However, according to Morgan (1988:477) accounting only reflects a process of how organizational reality is constructed by preparers of accounting information. These processes can vary from organization to organization and from individual partly because various different areas in accounting practice currently remain open for discretion.

Even, while determining what the term "accounting" means, scholars, academics and practitioners can sometimes find it hard to achieve consensus between each other. However the vast majority of scholars and researchers describe accounting as a system, aimed at registration and measurement of information to communicate and deliver it later on to the users. (see e.g. Needles and Powers, 2012, Kinserdal, 1993). Communication underlines constant adaptation of accounting systems to changing environment and different user's needs. (Bloomfield, 2008) To achieve a better alignment with surrounding circumstances standard-setting organizations are involved in continuous process of improvement and adaptation of accounting systems to the aforementioned matters.

One approach of adapting financial statements and internal reports to different users is preparing accounting information to a certain level of *materiality*. According to Iselin and Iskandar (2000) it is possible to define the materiality threshold as a border between material and non-material accounting information. Gårseth-Nesbakk and Mellempvik (2011:197) proposed a framework that explains the constituent elements of materiality and demonstrates how they affect the decision-making processes, which are done by the users of accounting information. Schematically this can be presented as shown in figure 1.

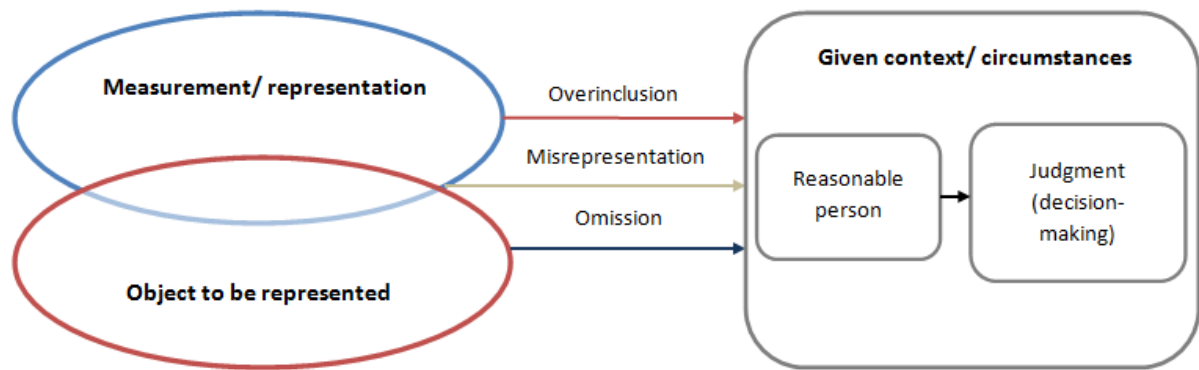


Figure 1: Constituent elements of materiality

(Source: Adapted from Gårseth-Nesbakk and Mellemvik (2011:197))

The model presented in Figure 1 implies that while measuring or representing certain organizational property or other object it is often impossible to measure it totally accurate. For various reasons the object can be misrepresented either intentionally or unintentionally. Moreover, it is possible to include too much unnecessary accounting information about the object or to conduct insufficient amount of measurements. Therefore materiality is influenced by the extent of the *over inclusion, misrepresentation and omission* and thus is impacts how much accounting information is included in financial and other reports and what information is left behind. At the same time materiality threshold implies to what extent this information represents the actual situation in the organization. Variations in materiality threshold influence the judgment of a reasonable person, who utilizes accounting information and makes decisions in particular environmental circumstances or context.

While conducting their study Gårseth-Nesbakk and Mellemvik (2011) discovered that materiality limit is dependent on various different factors such as *time, standardizing and thinking ahead, actor's background, communication and coordination difficulties* and *disagreement*. For instance, due to time constraint organizational employees can decrease the amount of accounting information that they measure and/or verify and thus can adjust accounting materiality. In some cases materiality can be discussed for instance between organizational employees and external auditors and can be adjusted during or after the process of discussion between the participating parties. This will be reflected in the documentation provided by external auditor as well as will impact the way organization presents its financial statements.

The way employees communicate and coordinate their activities will also influence the way materiality threshold is established in organization. For instance, if organization has many different subsidiaries in various countries the subsidiaries will have to take into consideration the rules and regulations of the government as well as of the tax authorities, while establishing materiality. The amount of owners would also influence the way materiality threshold is

established. For instance, if organization is listed on a stock exchange market and thus is publicly owned management personnel and preparers of accounting information will have to take into consideration needs of external users of financial reports and thus will have to adjust materiality threshold so that it would not distort the true and fair view of information disclosed in the financial statements.

The actor's personal characteristics and background also influence materiality threshold as well bookkeeping technicalities that are used in the organization. For instance, due to different interpretations of the same quantitative estimate individuals can have different opinions about materiality limit. At the same time, while establishing materiality some employees can rely on principles that are specific for every organization. Moreover, different accounting or auditing standards can propose various frameworks on how to measure or present materiality.

Gårseth-Nesbakk and Mellemvik (2011) continue that these factors are not the only ones that influence materiality threshold and there are other aspects that shape this concept. One of these factors is the context and circumstances, where the organization operates and where materiality decisions are made. For instance, Chewning et al. (1989) emphasize that external auditors tend to make more frequent and thorough assessment of materiality threshold, which is established for discretionary accounting items.

However, as stated by the authors, due to the fact that materiality threshold is a user-oriented concept, while making evaluations and assessments of materiality in practice it is of high importance to take into consideration the needs of the actual individuals that will be utilizing organizational accounts. For instance the concept of reasonable decision maker underlines that the user will try to follow a reasonable approach, while making for instance investment decisions based on the accounting information. However, in reality the investor can rely on irrational reasoning or can base his or her decisions not on accounting information, but on something else. Another assumption, concerning the users of accounting information is that they will maintain a certain level of professional knowledge and understanding about accounting information. However, in reality it is not always the case and sometimes it can be difficult to determine the extent to which accounting is correct or not even for the experienced users.

As stated earlier in the introduction chapter this study aims at exploring the characteristics of materiality that are emphasized by external auditors as well as by insiders that are involved in the process of materiality preparation and evaluation. To do that the researcher has decided to provide the reader with a materiality framework that would describe the relationships between qualitative and quantitative factors and the process of materiality establishment.

As stated by IAASB's International Standard on Auditing 320 "Materiality in planning and performing audit" (2009a), while establishing and assessing materiality the main emphasis should be put on perception of what affects the user's opinion about accounting information. The standard contains several assumption, concerning the users of accounting information. It suggests that the users should have "professional knowledge" (IAASB, 2009a:315) about economic and business activities of organization, as well as take into consideration the fact that accounting information of particular enterprise is prepared to a certain materiality limit. The users are also supposed to have an understanding that financial statements are prepared using certain specific estimations about future events, which most of the time rely on set of subjective assumptions. The users are also supposed to make reasonable economic decisions. (IAASB, 2009a:315)

While considering what level of materiality to establish it is also necessary to make assessment of risk analysis and try to mitigate it. While doing so it is important to determine the "nature, timing and extent" (IAASB, 2009a:315) of the risk assessments. The risk analysis that is supposed to be conducted, while considering materiality of accounting information consists of two major perspectives, namely "risk of material misstatement" and "detection risk". (IAASB, 2009a:317). While the former risk perspective assesses the actual probability of occurrence of material misstatement the latter evaluates the risk of the human factor, which is incorporated in the analysis of material misstatement.

In some cases, while establishing materiality threshold it can be reconsidered due to certain "specific circumstances" (IAASB, 2009a:316) that can force the individual to lower materiality threshold for a particular accounting item. This reconsideration is conducted based on the individual's perception on whether or not certain accounting item is viewed as important by the users of accounting information. The individual has also to take into account the type of the assessed organization or product, what stage of the life-cycle it is in and what type of external factors influence particular organization. The individual has also considered the internal factors of the entity, such as structure of organization, type of ownerships and source of financing used by organization. Besides the individual has to take into consideration the effect of laws and regulations and the way they affect the users of accounting information.

Moreover, according to the International Standard on Auditing 450 "Evaluation of Misstatements identified during the audit" (2009b), while considering a misstatement as material the individual has to assess, whether or not the misstatement has effect on compensation of management as well as whether or not it affects accounting items that relate organization to a particular parties (for instance top-management or customers). The individual also has to rely on his or her "judgment" (IAASB, 2009b:377) in those circumstances, when from the standard point

of view misstatement is considered as immaterial, but it affects the perception of users of accounting information.

From the quantitative point of view materiality of accounting information is affected by the size of the misstatement as well as by its impact on the “elements of financial statements” (IAASB, 2009a:318). According to IAASB (2009b:377) a misstatement can be considered as material, if it has a significant impact on the earnings and other trends that are considered as important as well as whether or not it affects key financial ratios that are used in the organization.

As stated earlier the determination of materiality of accounting information involves use of professional judgment of the individual and cannot be based solely on numerical calculations. According to IAASB (2009:371) the process of materiality establishment involves “communication of misstatements” and materiality discussions between external auditor and management of audited organization. The participating parties have to come to agreement on a particular level of materiality through the dialogue as well as through understanding the reasoning of the opposite side. During these discussions it is of high importance to consider the “qualitative aspects” IAASB (2009:375) that were used by management in order to establish materiality. In specific cases, when from the legislation point of view established materiality level can be considered as biased, external auditor can use his or her judgment to understand the reasoning of management through the discourse.

The final materiality limit will be documented by external auditor. Documentation will consist of materiality level for the whole financial statement, as well as materiality limit for specific groups of accounts. The audit documentation also includes performance materiality- that is the probability that the uncorrected immaterial misstatements in the aggregate can exceed the appropriate level of materiality. As stated by IAASB, (2009a:321) materiality threshold can be adjusted during the process of its establishment due to occurrences of certain circumstances. These adjustments will be included in the documentation process as well.

Relationship between the process of materiality establishment, qualitative factors that affect materiality and quantitative factors is presented in Figure 2.

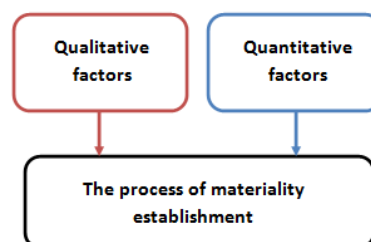


Figure 2: Materiality characteristics

(Source: own considerations of the researcher)

2.1.1. Qualitative characteristics of accounting information

According to Statement of Financial Accounting Concepts no.2 (FASB, 2008b) it is possible to conclude that materiality threshold of accounting information is a pervasive concept that is related to all *qualitative characteristics* of accounting information. These qualitative characteristics are developed by FASB in order to create a common framework or a set of principles that can be applied by individuals, who are involved in the preparation of accounting information. The use of this framework will allow “to guide regulation and reporting of financial information as a part of political decision process” Christensen (2010:1). According to Schroeder and Clark (1998:19) the qualitative factors framework can be used on two levels. It can be used by standard-setting organizations while creating new accounting standards or making amendments in the existing ones. On the second level this framework can be used by preparers of accounting information, which work in private and public organizations and are obliged to comply with accounting standards established by the standard-setting organizations. The framework that they have to rely on is explained graphically by figure 3.

While considering qualitative characteristics of accounting information it is of high importance to pay particular attention to *cost-benefit* considerations (e.g. Johanson & Plenborg, 2013). This characteristic implies that one of the main priorities that should be taken into consideration is, whether or not the benefits of putting certain accounting system into use exceed the costs of using it. Accounting information should also maintain a certain degree of understandability and the users of financial or internal reports should be able and be willing to use it. However, it is important to note that the extent of understandability depends both on those individuals, who prepare annual reports as well as on those who use it. Another important aspect that needs to be considered by the preparers of accounting information and by the standard setters is to what extent accounting information is useful for making decisions. However, while considering this property it is important to note that information should be useful for decisions on all levels in and around organization (see e.g. Young, 2000)

As stated by FASB, financial and internal reports are of use for the process of decision-making, when they maintain a high degree of *relevance* and *reliability* characteristics. According to Schroeder and Clark (1998:21) accounting information with a high degree of relevance should allow making correct predictions about the future and the past events. Additionally, as stated in Riahi-Belkaoui (2004) relevant accounting information should be able to influence the process of decision-making of the user of financial statement. According to FASB (2009b) in order to have a high extent of *feedback value* information from financial and other reports should allow verifying or falsifying user’s expectations about past events.

Accounting information that has a high degree of *predictive value* should provide the user with all necessary information in order to make predictions about future events, while using financial statements. Schroeder and Clark (1998:21) However, as stated in FASB's Statement of Financial Accounting Concept no.2 accounting information does not have to be focused on being oriented on make predictions. Instead it is sufficient for accounting information to include all necessary information about past and present organizational activities thus creating a sufficient basis for various forecasting techniques. In order to enhance the predictive value of accounting information preparers and standard-setters should focus on achievement of sufficient quantity and quality of data provided in financial statements and other reports.

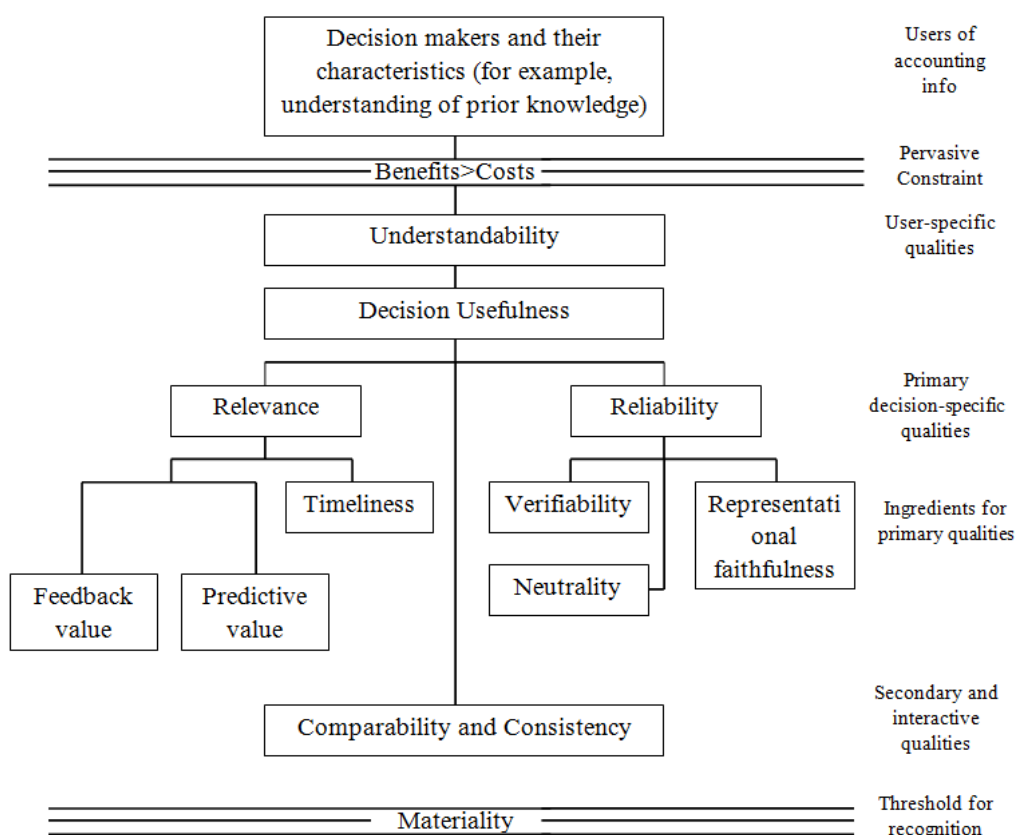


Figure 3: The qualitative characteristics of accounting information

(Source: Adapted from Schroeder and Clark (1998:20))

As stated by Riahi-Belkaoui (2004) accounting information has to maintain a certain degree of *timeliness*. This means that it has to be communicated on a timely basis to the users of financial reports. However, it is important to note that timeliness itself does not enhance relevance of accounting information. Instead it should be considered in combination with predictive and feedback values. Due to differences in the environment sometimes in order to

have a high degree of timeliness preparers can lower the quality and amount of accounting information, which they prepare. For this reason this qualitative characteristic has been widely criticized. For instance Young (2006) explained that in many cases timeliness assumes that there is “no context” (2006:596) that influences organizational activities and therefore it can stay the same despite the internal and external environment, where organization operates.

Therefore accounting information with a high degree of timeliness will in most cases contain a lower extent of other qualitative properties. According to Smith (1996) this can be an issue due to the fact that there is a conflict between the qualitative characteristics. For this reason, it will be difficult to achieve a high extent of all qualitative aspects included in the conventional framework and in reality the preparer will have to balance between different aspects of the framework in accordance with changing environmental circumstances.

According to the FASB’s Statement of Financial Accounting Concepts no.2 (FASB, 2008) accounting information should also maintain a high degree of *reliability*. However, reliability does not mean that financial statements or other reports should be effective for the user of accounting information. Instead it suggests that financial reports should fulfill their conventional purpose, for which they were made. As stated by Riahi-Belkaoui (2004) accounting information should also maintain a high degree of *representational faithfulness*. This means that the measurement of the object and its real representation should to a large extent correspond between each other. At the same time it is of great significance to consider the extent of *verifiability* of financial and other reports. A high degree of verifiability does not imply that preparer of financial statements used a correct approach, while disclosing some information from financial statements. Instead it implies that he or she was following the method that he or she has chosen and tried to avoid bias. The other qualitative characteristic, namely *neutrality* suggests that organizations should focus on enhancing relevance and reliability, while preparing financial and other reports.

All these properties impact the *comparability and consistency* of accounting information—a characteristic, which implies that it should be possible to compare organizational financial and other reports with organizations that work in a similar setting. Riahi-Belkaoui (2004) states that consistency does not imply that organization should not change its methods and techniques, Instead it means that chosen rules and principles by the organizations should be in congruence with the environment in which organization operates.

As it was stated earlier these concepts are related to accounting materiality. Materiality threshold is closely connected to the reliability and relevance characteristics of accounting information. For instance, while making considerations on whether or not certain misstatements are material it is of high importance to take into consideration the effect of the misstatement on

the user's ability to make predictions and historical comparisons (relevance). The degree of relevance will also change depending on the type and amount of material misstatements. (e.g. FRC, 2011; IAASB, 2011).

2.2. Accountability

Today there exist a large amount of accountability definitions. For instance Curtin and Nollkaemper (2005:4) defines the term "accountability" through the set of its features, namely that it is an externally oriented concept that connects an entity to surrounding environment. It involves as well social communication and relates to the role of the entity in the society. The concept of accountability also implies that there is certain authority to which an entity is accountable and if the entity does not meet necessary requirements listed by the ranked above organization or social group there is a possibility of negative consequences.

Another perspective was provided by Hale (2008:75), who emphasized that concepts of accountability relates to the notion of transparency. Hale (2008:75) continued that accountability can be divided into "*answerability*" or the right of the society or other organizations to receive information about entity as well as into the "*enforcement*"- a concept that implies that the entity will be punished if it violates certain rules or regulations. By increasing answerability and enforcement possibilities of particular organization societal actors can make organizations both in public and private sector more accountable and increase their level of transparency.

Various definitions have been outlined by Ebrahim (2003:813) such as viewing accountability as a mean to make organizational entity responsible for their actions. Extending the reasoning of Curtin (2006) Ebrahim (2008) continues that accountability as a concept maintains both external and internal properties. To be fully accountable every particular entity has to be driven by outer forces and societal demands as well as by its own "felt responsibility" (Ebrahim, 2003:814) that is its own feeling what is the right action that would be beneficial not only for the entity but for the society and other stakeholders.

Despite certain minor differences the clear majority of definitions explains that an organization or an individual is supposed to be "held to account" Curtin and Nollkaemper (2005:8) to others and thus is obliged to be engaged in a certain ethical code of conduct as well as is obliged to disclose information, which is demanded by the stakeholders. Importance of this concept has been highlighted by various different scholars and academics. For instance, according to Germain (2004) due to growing globalization processes organizational accountability became a concept that attracts interest in an international context, due to increasing economical and political organizational influence.

2.2.1. Types of accountability

According to Sinclair (1995:224) it is possible to distinguish several “forms” of accountability that provide a holistic overview over the “chameleon of accountability” Sinclair (1995:219). These forms are: *political accountability*, *public accountability*, *managerial accountability*, *professional accountability* and *personal accountability*. These perspectives provide a framework that can be used to study behavior of organizations and individuals both in private and public sectors. Each of these categories is discussed in greater detail in the forthcoming sections of the theoretical chapter.

The first type of accountability, namely *political accountability* implies that the entity should be accountable to official and governmental institutions. Sinclair (1995:224) For instance Jun (2012:12) stated that, while analyzing the extent of political accountability it is important to focus on determining what or who is the entity, which “exercises power”. Jun (2012:12) continued that in order to hold the entity politically accountable one should also try to find out how the entity exercises the authority and whether or not the actions of this entity should be controlled. However, relying on reasoning from Sinclair (1995:225) it can be concluded that political accountability as a concept refers mostly to public institutions and thus can be considered as irrelevant for this study. Therefore this perspective of accountability will not be used, while assessing and evaluating empirical data.

Public accountability

Another type of accountability is the *public accountability* that is responsibility of organization to consider the needs of different societal groups. Sinclair (1995:224) According to Smulovitz and Peruzzotti (2000) societal accountability in general can be divided into two main perspectives: “*horizontal*” and “*vertical*” Smulovitz and Peruzzotti (2000:148). While the former ensures the top-down quality of the way how the entity is functioning the latter involves citizens as mechanisms that are in charge of making a particular entity socially accountable.

Horizontally entity can be accountable to specific “oversight agencies” Smulovitz and Peruzzotti (2000:153), which have both the power to enforce certain sanctions over the entity, if violations of certain legislative or societal norms have taken place. These agencies also have the power to investigate the nature and structure of the entity in order to verify to what extent is the entity accountable to society.

Vertically the entity is accountable to a variety of organizations, starting from media, non-governmental organizations and social movement’s and to the citizens and public in general.

Accountable entity is thus obliged to engage itself into the “public exposure” processes Smulovitz and Peruzzotti (2000:153) as well as taking into consideration the agenda, which can be set up by the mass-media sources and various societal groups.

Smulovitz and Peruzzotti (2000:156) address several challenges that are faced by the current social accountability systems. The first challenge is whether or not the current social accountability models allow achievement of efficient results. For instance, as described Goetz and Jenkinz (2001:7) in the modern social environment there is a trend where the “soft” aspects of social accountability are emphasized. Therefore the clear majority of social accountability issues are treated as something of temporary nature.

Smulovitz and Peruzzotti (2000:156) also emphasized importance of social circumstances, namely the extent of influence and power of institutional organizations in the social environment as well as cultural traditions and norms in a particular society. This information is supported by Newell and Wheeler (2006:49), who explained that sometimes entity can face certain resistance to implementation of social accountability norms and practices due to their incongruence with the context, where the entity operates.

While considering social circumstances it is also important to consider historical background of a given social group and the way it has shaped its perception of reality. These circumstances are considered as a challenge by Smulovitz and Peruzzotti (2000:156) due to the fact that sometimes both from internal and external perspectives it can be difficult to gain access to the nature of these factors and understand how they have emerged. Therefore this complicates the understanding of the social conduct of the particular entity that is forced to operate in these conditions.

The final concern addressed by Smulovitz and Peruzzotti (2000:156) is that due to the fact that societal members do not have to legitimize themselves they might end up utilizing social accountability in a wrong way. This may happen, because the majority of members of the society might not have sufficient professional knowledge. Their actions can also be driven by personal incentives. Therefore it is important to consider, whether the legal framework that shapes social accountability takes these issues into consideration. (Crook and Houtzager, 2001)

Managerial accountability

This section of the theoretical framework is partially based on the information from the researcher’s project work.

The next form of accountability, namely “*managerial accountability*” implies that the entity is accountable to those, who are in charge that is to administrative personnel in the organization Sinclair (1995:224). Mulgan (2000:559) described managerial accountability as a

responsibility of organizational employees to superior hierarchical structures such as for instance administration personnel or organizational owners. Newman (2004:30) underlined that it is of high importance to consider, whether or not the entity is engaged in agency behavior, while assessing extent of its managerial accountability.

Sappington (1991:46) explains that agency theory focuses on achievement of consensus through the contractual relationship between two participating parties, namely principal and agent. It is possible to describe principal as an entity that has to hire an agent in order to manage organization. During his or her work an agent can obtain more insider knowledge than the principal has due to agent's direct involvement into management of organizational activities. However, agent and principal can have different incentives and personal needs and thus this information asymmetry can become a challenge and result in severe consequences, which can be damaging both for the principal and for the agent.

As explained by Eisenhardt (1989) agency theory relies on a set of assumptions, namely it assumes that entities that participate in the principal-agent relationships will not act altruistically and will rely on their self-interests. It also relies on idea that both entities will try by any means avoid risk. Eisenhardt (1989:59) continued that the principal and the agent are supposed to be at least partially in conflict between each other and have different incentives. It was as well stated that principal-agent relationships imply an "information asymmetry" that is, when one entity has more information about current activities in the organization than the other. As mentioned earlier due to severe negative consequences for the principal he or she has consider the possibility of "moral hazard" from the agent. Therefore the principal is supposed to engage him or herself in renting information from the agent and providing in exchange a bonus-system that rewards the agent on a contractual basis.

Eisenhardt (1989) stated that in the modern academic community it is possible to distinguish between two large directions in the agency theory: "*positivist agency theory*" and "*principal-agent research*" Eisenhardt (1989:55). While the former focuses on internal research of the relationships between the principal and the agent in large corporations, the latter approach relies on a more general attempt to determine the reasonable amount of compensation for the agent. However, Eisenhardt (1989) continues that in every approach the main focus of the researcher should be put on mitigating uncertainty and risk between the agent and the principal. To do that the researcher has to focus on trying to determine, whether or not it is possible to uncover potential incentives of participating parties as well as have an understanding of what is considered as an appropriate performance of the agent by the principal.

It is noteworthy to mention that traditional agency theory provides the reader with a simplified framework about relationships of between entities in organizations and in reality these

relationships can be much more sophisticated, involving several agents and several principals both inside the organization and outside of it. (Shapiro, 2005) Therefore, while applying this theory in real situations the researcher has to take into consideration the differences between its theoretical representation as well as practical implications in real-world examples.

Professional accountability

The entity is also obliged to be accountable to its *profession* that is to the traditional principals that are incorporated into entities' working position Sinclair (1995:224). As stated by Caulfield (2011:16) these principles or standards are defined either by the profession itself or by certain national agencies or standard setting organizations. Caulfield (2011:17) continues that professional accountability can be enforced by influencing four major factors, namely "*people, settings, products, services*" Caulfield (2011:17).

In order to be accountable to their profession people have to fulfill necessary qualifications that is they have to maintain necessary knowledge to be able to work at that profession. They also may need to have relevant work experience, education and personal skills that are required for particular profession. Moreover, it is very important to consider the situations, where people exceed their official powers and they are obliged to leave their profession. The final factor that influences professional accountability of people is whether or not they were engaged in an appropriate "code of conduct" Caulfield (2011:17) that is whether or not they were following the minimum behavioral requirements that were demanded by their profession.

As stated earlier in order to enhance professional accountability the entity has to work in a specific professional setting, which corresponds the working requirements. The entity has to be provided with all the necessary equipment, which is required in order to complete his or her work successfully. Caulfield (2011:17). This notion is supported by the Mahlmeister (1999:301), who described this criterion as "availability and accessibility of the resources".

Another way of ensuring that the entity is accountable to its profession is that the products used by the entity during his or her working process are in line with professional standards and are "fit for the purpose" Caulfield (2011:17).

The final factor, which was emphasized by Caulfield (2011:17), is whether or not the entity is able to ensure the quality of his or her services by providing certain guarantees either by itself or by specific third-party organization or individual. This idea was extended by Donaldson (2006:66), who stated that the entity is responsible for assessment of risk of failing to provide the service with the necessary quality level. Therefore to enhance its professional accountability the

entity must engage itself in risk reduction and risk avoidance techniques in order to mitigate the possible negative consequences of failing to provide the client with demanded services.

Personal accountability

Sinclair (1995:230) described that in order to be accountable personally the entity has to act in accordance with its internal values and beliefs. Hall et al (2007:407) describe this notion as “self-accountability” or necessity of an individual to be in congruence with his or her own personal aims and ambitions, family needs and perception of what is an ethical behavior. Hall et al (2007:407) continue that in order to assess the extent of individual’s personal accountability it is necessary to take into consideration four main perspectives, namely *accountability source*, *accountability focus*, *accountability salience* and *accountability intensity*.

As stated by Frink and Klimoski (1998) there are multiple factors that can be considered as a source of personal accountability. This involves both internal and external circumstances. For instance individual can rely on his or her beliefs that were obtained throughout his past experience as well as on information that he or she received externally from his or her colleagues, clients and partners during the working process. Hall et al (2007:407)

Hall et al (2007:407) continue that accountability focus can be viewed as an ability of a person to be accountable for his or her process of making decisions as well as responsible for the consequences of those decisions. This notion is extended by Siegel-Jacobs and Yates (1996:14) who distinguish between *procedural accountability* that is an individual ability to adjust his or her actions and individual processes in accordance with his or her accountability norms and *outcome accountability*- an accountability approach which suggests that an individual should take into consideration the consequences of his or her decisions and actions.

Hall et al (2007:408) continue that an individual with a high level of accountability salience takes into consideration the impact of significant outcomes not only of his or her decisions, but course of actions of his colleagues and organization in general. The individual should also take into consideration his or her role in impacting behavior of his or her co-workers and mission of organization, which could lead to severe consequences.

The latter perspective outlined by Hall et al (2007:409), namely accountability intensity implies that sometimes an individual can be held accountable to several outcomes or several organizations or individuals, which force the particular individual to balance between the needs of these entities. Page (2006:171) describes this notion as a “web of accountability” and provides the reader with an example of public management employee that is held accountable to the agency staff, clients, legislators, administrative superiors and others.

2.3. Contingency theory

According to Chapman (1997) it is possible to view accounting reporting and control systems from perspective of contingency theory. In his article Chenhall (2003) summed up a significant portion of research on contingency theory and proposed that every management control system can be considered as a “passive tool” (Chenhall, 2003:129) that is dependent on certain contingent or contextual variables. According to Chenhall (2003:128) these variables are: *external environment, technology, organizational structure, size, strategy and national culture.*

External environment

Chenhall (2003:137) stated that external environment is one of the most important contextual variables that affect management control systems, due to the fact that it to a large extent shapes organizational MCS but there is a high degree of uncertainty related to this variable. Chenhall (2003:137) continued that external environment can be described by several characteristics such as its *turbulence* (how much does it fluctuate) as well as *hostility* (the extent to which external environment is aggressive to the organizational MCS). Another important characteristics of the environment are its *diversity* (how many competitors does the organization have) and *complexity* (the speed of technological changes). On the basis of the reviewed literature Chenhall (2003:138) concluded that MCS will be less structured and externally oriented, if external environment is highly turbulent. Chenhall (2003:138) also emphasized is that if external environment is highly turbulent organization will rely more on strict and formal structures of the MCS. Finally Chenhall (2003:138) stated that formal MCS that are applied in a turbulent external environment will be partly based on contacts and relationships between individuals.

Technology

Chenhall (2003:139) continued that MCS is dependent on organizational technology or type of organizational activities and their interrelation between each other. Organizational technology consist of variety of different aspects such as “hardware, materials, people, software and knowledge” Chenhall (2003:139). Chenhall (2003:140) stated that there are several trends which are related to the concept of technology as a contingency variable. For instance, rigidly structured and automated technology is related to formal MCS and vice versa. At the same time MCS that have adopted technologies that are based on interdependence rely less on formal control systems.

Organizational structure

Chenhall (2003:145) explained that another contextual variable, which is related to MCS is the organizational structure. This variable describes how do organizational employees fulfill their working responsibilities at particular organization. Chenhall (2003:145) stated that the impact of organizational structure on organizational MCS can be analyzed by paying attention to the “*outcomes of structure*” as well as to “*structural mechanisms*”, which can be based upon “*mechanistic*” or “*organic structures*” (2003:145). While analyzing literature on the topic Chenhall (2003:147) stated that it is very common that large organizations do not have a highly centralized structure and vice versa.

Size

Chenhall (2003:148) stated that organizational MCS is to a large extent dependent on the size of the organization, which has adopted the MCS. For instance, there will be substantial differences between how international corporations and small local enterprises adopt similar MCS. Moreover large organizations tend to have various departments as well as tend to have very complex internal control systems (2003:149).

Strategy

Chenhall (2003:150) continued that strategy is a contextual variable that is different from others, due to the fact that it is aimed at disproving that organizational MCS is passively driven only by the contextual variables and the way organization established its strategy is reflected in its management control system. For instance organizations that focus on being a cost-leader will likely to have formal MCS adopted at their organizations, whereas organizations that are aimed at differentiating their products will have MCS that are adapted for rapid changes. Chenhall (2003:151)

Culture

The final contextual variable, which was emphasized by Chenhall (2003:152) is the national culture that is related to the design of organizational MCS. Chenhall (2003:154) For instance Japanese organizations tend to prioritize highly structured budgetary control systems, whereas the opposite trend can be determined, while observing local organizations in Singapore. Chenhall (2003:153)

2.4. Summary of the theoretical framework

Within this chapter the researcher has outlined the main theoretical concepts that will be used throughout this study. This part of the master thesis presented the reader with an overview

on the concept of accounting materiality as well as on the qualitative characteristics of accounting information, accountability and contingency theory. The concepts and notions, which were described within this theoretical framework, will be applied later in the research in order to analyze information received during the data collection process.

3. Methodology

3.1. Philosophical assumptions underlying the research

In modern social science community there are different philosophical schools of thought. Different researchers rely on various propositions in terms of ontology or “assumptions about nature of reality” (Easterby-Smith et al., 2013:17) and epistemology or ways of investigating into different phenomena that occur in the world. This study is based on *relativistic* approach, which suggests that one specific event can be viewed differently by different participating parties and facts are dependent on perspective of the viewer. In addition to this, relativism usually implies that observer’s viewpoint can be changed, because of his or her position in the society as well as because of personal experience. This idea relates relativism to *social constructionism*- an epistemological paradigm, which focuses on how different participants construct social reality and truth around them and what subjective and personal factors are behind certain decisions. (Easterby-Smith et al, 2013:23)

Therefore, according to the chosen ontology and epistemology it is necessary to analyze certain event in greater detail aiming at uncovering interests of a person, who is responsible for the formation process of a fact. This will provide a deeper insight of the event studied. Moreover, it is of high importance to conduct an evaluation of the context, where decisions or judgments about certain event were made.

The main technique, which makes gaining a deeper understanding of such kind of phenomenon possible, is *triangulation*. It implies that researcher has to gather opinions and perspectives of different participating parties and from different sources on the analyzed event, so he or she could create a coherent picture of the studied event, which could be utilized later on in order to analyze and possibly contribute to further knowledge improvement of organizations and individuals affected by the phenomenon as well as of academics and scholars. (Easterby-Smith et al, 2013:26)

To reach these aims research has to provide a description of different views on the problems of materiality that portray the phenomena in greater detail. Materiality of accounting

information contains certain subjectivism, because of different materiality characteristics that are incorporated in the judgment process of the insiders and the external auditor. This results in different estimates and research approaches by academics that study materiality of financial reports. Therefore this research has to demonstrate various problems and perspectives outlined by scholars that are related to materiality of accounting information and at the same time has to provide a description of areas that remain currently unexplored within given phenomena.

Theoretical framework applied in the research consists of different perspectives of researchers on the subject. Even though this research has its main aim in assessing the phenomenon within the scope of theories it is expected that combination, integration and analysis of received data and concepts developed in the framework will allow making a contribution to existing theories and providing scholars and academics with new insights and new potential ways of creating new concepts and frameworks. (Easterby-Smith et al, 2013:73)

3.2. Research design

3.2.1. Rationale for the choice of the research design

This research is designed as a comparative case study. A case study is a type of research design, which can be used when the study requires an “in-depth description of some social phenomenon”.(Yin, 2014:4) Yin (2014:16) also states that case study usually provides this investigation into analyzed event, when its boundaries are unclear and vague and when an inquiry is needed to provide a better understanding about it.

In the modern research community case study as a research design is applied in a variety of professions and disciplines. Scholars use it to develop theories about descent of humanity as species; psychologists utilize this design to learn more about psychiatric health of their patients; political analysts apply it to study issues of power delegation and responsibility of politicians before the law and society. This design is widely used in the business-community. With the help of this research design scholars, academics and business researchers study issues related to organizations functioning on the international level. Case study is also applied, when researchers need to make an inquiry in the public sector. At the same time there are different accounting studies that use this methodological approach. Yin (2014:16)

According to Yin (2014:9) the choice of case study as a research design depends largely on three main conditions: *a) the type of research questions that are used in the study, b) whether or not the researcher has control over the behavior of individuals, who are a part of the*

phenomenon investigated and c) whether or not it is possible to access people, who are or were directly affected by the researched event.

Yin (2014:10) states that case study research questions should start with “how” or “why” interrogative word. However this study has two research questions that begin with “what” question word. In this case Yin (2014:11) explains that these types of questions can be attributed to the “how many” or “how much” questions group and studies like these should be conducted applying different methodology. Yin (2014:10) states that these research question types are utilized when there is a necessity to describe “prevalence of a phenomenon” or when it is possible to predict the outcomes of the event studied. In case of this study the research questions used are “what”- type questions. And at first glance it might seem that they are aiming to show the incidence of materiality characteristics in materiality concept. However, this study is aimed at doing an exploration of the role that characteristics of materiality play in defining and evaluating materiality in a specific industry. Therefore, there is a very high degree of uncertainty connected to the results of this study and in this case, as stated by Yin (2014:10) this type of research questions can be used.

Yin (2014:12) continues that to qualify the second condition for doing a case study researcher has to have no control over studied individuals or events otherwise experimental approach is a more suitable design for the research. As it is probably known the researcher of this study has not had professional relationships with organizations, which he has chosen as a case for this empirical study. He also has not had any relatives or personal contacts in these organizations prior to the conducted research. Therefore it can be concluded that the researcher has no control over the individuals studied in the organization and this qualifies the second condition stated by Yin (2014:12).

The final condition implies that case study cannot rely only on historical data and uses also perspectives of participating parties, which are gained through the interviewing process Yin (2014:12). As stated in the beginning of this chapter this study aims at triangulating opinions and views of different participants and thus has its main focus on the analysis of contemporary data obtained through interviews.

According to Yin (2014:19) there are several common concerns about case study, which are found to be present in various works of different researchers. By addressing these traditional concerns of this research design the researcher is aiming to prove that methodological approach applied to this study is valid.

As stated in Yin (2014:19) case study researcher sometimes is not being systematic and is not following certain procedures, while conducting a case study and thus lets himself or herself to be driven by the findings he or she had obtained. This means that researcher has to follow

certain patterns and procedures throughout his or her research path and avoid being “sloppy”. In the context of particular case this, of course, is a very important concern due to the fact that there are not so many investigations of such kind that have been done before. This implies that researcher cannot be absolutely certain about the findings, which he is going to obtain throughout gathering process of empirical data and therefore cannot predict what how the findings are going to be analyzed in the discussion chapter. However, the researcher aims to follow a certain pattern, while conducting interviews and triangulating opinions, as well as sticking to providing a coherent overview and cover all potential aspects of the answer of to the research questions stated in this study. Nevertheless, it is perfectly clear that due to limited amount of time and human resources the researcher may not be able to provide a complete coverage of all aspects of phenomenon. In this case the researcher will outline uncovered perspectives in the limitations part of the conducted research.

The next uncertainty as suggested by Yin (2014:21) is that case study can result in an unmanageable level of effort and thus will result in enormous amounts of information, which is necessary to process and analyze and therefore neither the researcher nor the reader will have an understanding of phenomenon. However Yin (2014:21) continues that in the modern research community this does not represent the truth and these are the challenges associated with this research design that were conducted in the past. In case of this study it is implied that chosen phenomenon has a set of boundaries and the research does not have its aim to investigate the phenomenon via direct participation and interaction with phenomenon.

The final common concern is whether or not case study has an advantage in comparison with other methodologies Yin (2014:21). As it was stated in the beginning of the methodological chapter case study is aimed at an in-depth investigation of a phenomenon, especially when its boundaries are unclear Yin (2014:16). The phenomenon, which is supposed to be analyzed in the study, cannot be researched using a survey methodology, due to its vagueness and subjectivity. For these reasons establishing a questionnaire will be possible, but it might not include all relevant materiality characteristics, which are used by the insiders as well as by the external auditors. This negatively affects *construct validity* of such kind of research, due to the fact that such kind of research will not be able to provide a correct measure of phenomenon studied. Secondly, due to exploratory nature of the study it remains unknown, what results will be obtained throughout the gathering process of empirical data. Therefore, case study is more favorable than survey methods. An in-depth investigation of this phenomenon could be done by using ethnographical approach (see e.g. Easterby-Smith, 2013:51) that is if the researcher could become a part of the researched object and through direct interaction with phenomenon could receive very detailed information about researched topic. However, due to limited amount of

resources in terms of access to employees and to commercial classified information the researcher cannot engage himself into such kind of research. Therefore the case study seems to be a reasonable choice for investigation of researched phenomenon.

3.2.2. Constituent elements of the research design

According to Yin (2014:28) a research design in general terms can be viewed as a “logical plan for getting from here to there”. By that he implies that researcher should have a certain draft of how he or she plans to move logically and gradually from defining the problem and research questions to data collection, analysis and conclusion. As a research design every case study has to have certain general patterns such as *case study questions* and *units of analysis*,

The choice of research question is justified earlier in the methodological chapter. Another important concern, stated by Yin (2014:29) is that it is essential to understand the substance of research questions and necessity to analyze other research studies on the topic to indentify a “gap” in theory. This is supposed to make research questions more relevant for the social science community. In case of particular research the practical problem, associated with the phenomenon is outlined in the introductory part of this research.

As stated earlier this research is designed as a comparative case study that is it involves comparison of multiple cases. The main rationale of such kind of research is based on the notion that through comparison researcher might be able to develop certain policies that can be applied in similar situations. Yin (2014:60) This can be done via *literal replication* of cases, which aims to predict similar results through comparison process. Yin (2014:63) states that to achieve literal replication researcher must choose each case carefully. In this multiple-case study an *embedded multiple-case study design* is applied. In contrast to a *holistic case study design* an embedded multiple case-study approach implies comparison of two or more cases taking into consideration the context, where they operate. Schematically this can be presented as follows:

As presented in Figure 1 this research aims at comparing views and perspectives of the insiders related either directly or indirectly through their working responsibilities to the process of materiality establishment and assessment. Similar method is used to compare perspectives of the external auditors in audit firms, which are assigned to verify accounting information and are involved in the process of materiality threshold establishment. The aim of these comparisons is to uncover different materiality characteristics that are emphasized by these two participating parties that are involved in the formulation process of materiality threshold, its use and application in practice. This is supposed to contribute to understanding of materiality threshold by providing policy implications that can be used by scholars and academics as well as by

practitioners, while dealing with materiality of accounting information. Each embedded unit of analysis is described in greater detail in the data collection section of this chapter.

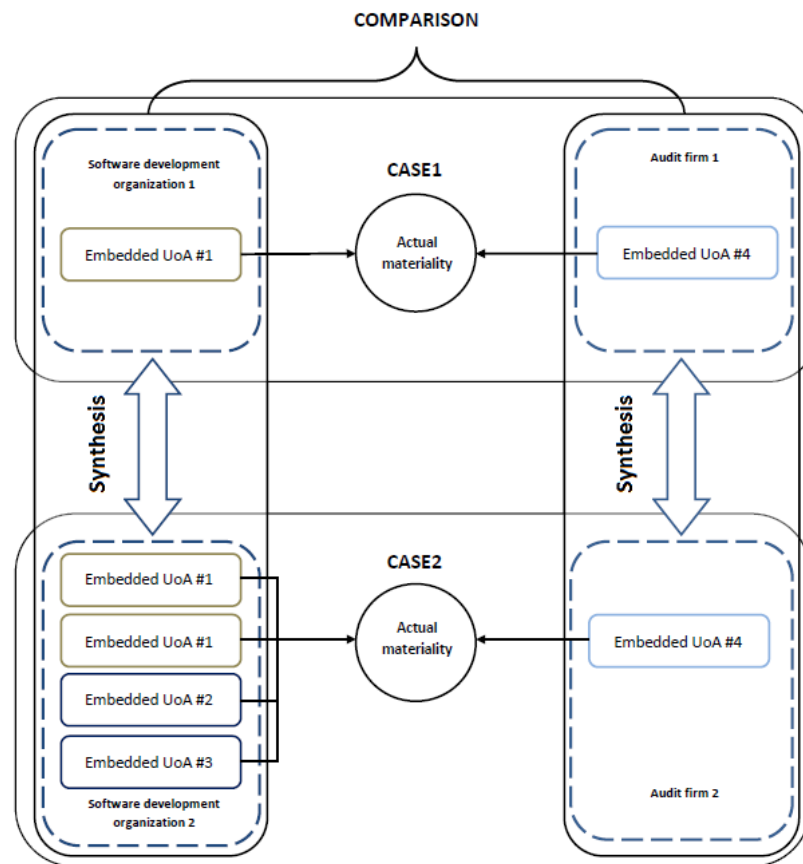


Figure 4: Embedded research design of particular multiple-case study

(Source: Adapted from Yin (2014:50))

Figure legend:

“*Embedded UoA1*”- Management personnel in software-development organization

“*Embedded UoA2*”- Board of directors member in software-development organization

“*Embedded UoA3*”- Professional accountant from professional accountant firm, responsible for the preparation and verification of financial statement in software-development organization

“*Embedded UoA4*”- Independent auditor of software-development organization

3.2.3. Units of analysis

Yin (2014:31) suggests that formulation process of unit of analysis consists of two major steps, namely defining the unit of analysis or the “*case*” and outlining the boundaries of unit of analysis. Yin (2014:32) also states that very often phenomenon and unit of analysis can be two separate entities. Yin (2014:31) suggests that the most common choice of the unit of analysis is a certain person or an individual. It is as well possible to choose an event or other entity as a case. However, it is often very difficult to define such cases and limit their boundaries.

In the context of this research there are two cases. Each case consists of a software development organization and audit firm, where insiders and independent auditors are involved in the process of materiality establishment or evaluation. As stated above due to the fact that the researcher has focused on using embedded case design it involves several embedded units of analysis.

The first embedded unit of analysis is the *management personnel* in software-development organization that is related to the preparation process of financial statement through direct or indirect working responsibilities. As it was stated in the introductory part of this research, management personnel is one of the main participating parties, when it comes to process of materiality threshold establishment and evaluation. Therefore to gain understanding of materiality characteristics that are incorporated in shaping judgment about materiality it is important to gather knowledge of management personnel related to the process of preparing financial reports. The most important factor, while determining such a unit of analysis in software-development organization is whether or not this individual is not only related to directly to process of assessing materiality, but also has a deep understanding of the process how materiality threshold is established in certain organization. Materiality of accounting information can be viewed as a concept that can harm organizational confidentiality (see e.g. Kenneth, Brad, 2000). Therefore it is implied that individuals, who have certain organizational-specific knowledge about materiality of accounting information are related to the materiality establishment process in particular organization and thus using them as an embedded unit of analysis for determining characteristics of materiality is possible.

The second embedded unit of analysis is the *board of directors member*, which is responsible for the overall evaluation of the accounting information, provided to him by organizational employees. As a decision-maker board of directors member carries the responsibility of monitoring performance of organization and appraisal of management activities (see e.g. Soltani 2007:78) and thus partly carries responsibility that organizational accounting information does not contain any material misstatements or omissions. After interviewing board

of directors member the researcher aims to gain a deeper understanding of materiality characteristics.

The third embedded unit of analysis is the *professional accountant* from professional accountant firm that is responsible for the preparation of financial statements for the software development organization. Due to direct involvement and control of accounting information the researcher considers it as important to investigate what characteristics of materiality are emphasized by this embedded unit of analysis.

Similar reasoning is used when it comes to embedded unit of analysis number four or the *external auditor*. This unit of analysis is supposed to work in audit firm that is responsible for verification of software-development organization that has been chosen for this comparative study. According to information stated earlier in this research external auditor participates directly in establishing materiality threshold and in its evaluations. For this reason an investigation into external auditor's views provides a rational perspective on characteristics of materiality.

To determine the boundaries of all embedded cases used in this study the researcher will focus on embedded unit of analysis that work in Bodø, Norway in audit firms, software development organizations or professional accountant firms used by these software-development organizations. To qualify as a unit of analysis the chosen case must be directly or indirectly related to processes of preparation or verification of accounting information for the organizations included in the study. The case must also be familiar and have extensive knowledge about materiality of accounting information as a concept and must be informed about methods of its assessment and evaluation in particular audit firm or software-development organization. At the same time chosen unit of analysis must either currently maintain a working position in chosen audit firm or software-development organization or he or she has to maintain that position in the recent past to be able to inform the researcher about the materiality approach used in the organization.

3.2.4. Anonymity

According to Yin (2014:197) it can be sometimes necessary for the cases used in the research to remain anonymous, especially when the research is a controversial topic. In this case anonymity of the organizations, employees and products is conducted in order to protect organizational entities. As stated earlier in the methodological chapter by providing a full disclosure of the process of materiality establishment employees in the organization open themselves for a certain risk and thus can accidentally disclose information, which is a part of corporate secrecy in the organization (see e.g. Kenneth, Brad, 2000). To prevent this from

happening the researcher has converted names of the interviewees, names of the organizations and names of the products that are developed in order to preserve anonymity of these entities.

Respondents table

The interviewee's names, positions, responsibilities duration of the interviews that were conducted throughout the research and the respondent's codes are presented in the Table 1.

Table 1: Respondents table

Embedded unit of analysis type	Interviewee's name	Interviewee's position	Duration of the interview	Interviewee's responsibilities	Respondent's code
Embedded UoA#4	Respondent #1	Senior manager at AORG1	01:18:00	External audit of ORG1 and other organizations	AUD1
Embedded UoA#1	Respondent #2	Financial director of ORG1	00:45:00	Financial management, internal control and decision-making	MAN1
Embedded UoA#4	Respondent #3	Administrator of AORG2	00:50:00	Administration	AUD2
Embedded UoA#1	Respondent #4	Financial director of ORG2	01:28:00	Internal management and control, management of organizational finances	MAN2
Embedded UoA#2	Respondent #5	Board of directors member at ORG2	00:38:00	Organizational management, strategy and decision-making	BODM2
Embedded UoA#1	Respondent #6	Former CEO and financial director at ORG2	00:50:00	Internal management and control, management of organizational finances, top management	CEO2
Embedded UoA#3	Respondent #7	Professional accountant at ACCORG2	00:50:00	Preparation of financial statements for ORG2	ACC2

3.2.5. Interviewees working experience and responsibilities

MAN1

MAN1 currently maintains a position of financial director at ORG1. He has been working in ORG1 for more than ten years and currently he carries a wide range of responsibilities at ORG1 starting from recruiting new personnel and decision-making to managing organizational economy and finances.

AUD1

AUD1 is currently maintaining a working position as a senior manager at AORG1 and is connected to ORG1 through a set of working relations for more than four years. However, the interviewee stated that ORG1 has been a client of AORG1 for a long period of time before that. The senior manager of AORG1 has an extensive experience as an auditor- he has been working in another auditing organization for approximately fifteen years.

MAN2

MAN2 currently maintains a position of a financial director at ORG2. However, as explained by the interviewee he is working at this position starting from beginning of 2015. His main responsibilities include internal management and control of organization as well as management of organizational finances. MAN2 also has an extensive professional background from accounting industry and he worked as an external auditor and decision-maker.

AUD2

AUD2 is currently maintains a working position as “kontorleder” or department leader of the AORG2 and therefore he is supposed to be familiar with the general approach of how materiality threshold should be established in this audit firm.

CEO2

CEO2, with whom the interview was conducted, represents a unique combination of professional characteristics, due to long working experience in the auditing industry as well as more than ten years of experience at various administration positions and as a CEO until 2015 at ORG2. As explained by CEO2 at ORG2 she maintained two working positions simultaneously and used to work as a CEO and financial director. Therefore, while referring to this interviewee the researcher considers her as management personnel at ORG2.

BODM2

BODM2 is the co-founder of ORG2 and maintains a position as a member of board of directors in this organization. BODM2 also has an extensive background as a professional

accountant as well as an audit assistant, which together constitutes more than twenty years of experience in both accounting and auditing industries.

ACC2

ACC2 works as an accountant at the professional accountant firm ACCORG2. This organization provides its services to the ORG2 and partly is responsible for the preparation of information in financial statements as well as for its verification and compliance with accounting standards.

3.3. Data collection- In-depth interviews

The main source of data collection process used in this study is semi-structured in-depth interviews. While applying this type of interview the researcher aims at uncovering views and perceptions of the interviewees through the language patterns, which are used through the course of the interview. (Easterby-Smith et al., 2013:126) This technique is discussed in greater detail in the interview section of the methodological chapter. The researcher aims to conduct a *shorter case study interview* that is an interview, which is approximately one hour long. According to Yin (2014:111), while applying such type of an interview researcher should stick more closely to his or her pre-planned structure. The main concern of such kind of interviews, as proposed by Yin (2014:112) is that interviewer and interviewee can influence one another throughout the process of conversation. This phenomenon, which is also known as “*reflexivity*” is very often unavoidable process. Nevertheless, one must be familiar with this notion so it would be possible to minimize its negative effect.

As stated earlier the researcher has his main aim in analyzing and understanding phenomenon through the process of triangulation. However Yin (2014:120) outlines that there are different ways of achieving triangulation. One can either use information from different data sources (*data triangulation*) or use information gathered from different participants (*investigator triangulation*) or can try to apply different theoretical perspectives to the similar findings obtained through the course of data collection (*theory triangulation*). It is also possible to use different methodologies and techniques, while having the same theoretical framework and findings in research (*method triangulation*). Due to lack of access and time restrictions this research will not include data triangulation that is it will focus only one source of data-information obtained from in-depth interviews. The same applies method triangulation. However the researcher plans to focus on investigator triangulation and with this aims to increase the *construct validity* of the study. Moreover, the researcher will assess the data, from empirical sections by applying different theories.

From information provided by Figure 4 the researcher gathered opinions from two organizations that work in software development industry and representatives from their audit firms. The first interview was conducted with financial director of ORG1- a software development organization that develops programming support products for Norwegian healthcare sector. At the same time an interview was conducted with their external auditor from AORG1 to gather his perspective on the process of materiality establishment. Essentially similar process was conducted with the ORG2- organization that develops accounting software for various clients across Norway. The researcher has conducted interviews with financial director of ORG2, board of director's member and this organization and former CEO, who also used to work as financial director in this company. It is known that ORG2 uses services of ACCORG2 – a professional accountant firm that is responsible for the preparation of financial statements for ORG2. However, it is assumed that both organizations participate in the process of materiality establishment and therefore conducting interview with representatives from ORG2 will provide a sufficient basis to cover their perspective on how materiality threshold is assessed. ORG2 uses services of AORG2- an audit firm, where the researcher conducted interview with the administrator of the organization to uncover their general policies on the process how materiality threshold is established.

3.3.1. Preparation for the interviews

While planning the structure of the interview the researcher decided to focus on semi-structured in-depth interviews. As explained by Easterby-Smith et al. (2013:132) this type of in-depth interview can be used, when it is necessary to understand the constructs, which are used by the interviewee as well gaining a deeper understanding into the interviewee's perspective of the researched phenomenon. Semi-structured interviews can also be used, when the logic of the situation remains unclear due to confidentiality of the researched topic. As it was stated earlier in the introductory part the researcher has his main in investigating what materiality characteristics are applied in practice. Therefore the choice of semi structured in-depth interview as a main data collection technique seems to be reasonable.

While preparing to the in-depth interviews the researcher has had his main aim in sticking to the principles stated in Yin (2014:73). The researcher tried to focus on asking good questions, in other words he tried to focus on open-ended questions, where it was impossible to give a straightforward “yes or no” answer. He also tried to prepare interview guides that are specific for every interviewee group, questions that are asked to see similar patterns between the cases and used sub-questions to narrow down on certain topics.

He tried to be a good listener and tried to uncover hidden messages in answers presented by the interviewees. While preparing for the interview the researcher focused on investigating

deeper into every question, which was included in the interview guide. To do this he prepared different follow-up questions, which were not included in the sent interview-guides. With this researcher aimed to achieve a certain “surprise effect” leaving almost no time for the interviewee’s to prepare to answer asked questions. With this researched aimed to receive a more in-depth insight into organizational activities and views on the studied phenomenon.

At the same time he focused on adapting to receive additional information from the interviewees through establishing trust-based relationships between him and the interviewees. To do this researcher sent out the interview guides to the respondents before the interviews in order to make them familiar with the topic of research.

Even though this research has an exploratory focus, the researcher decided to stick to certain patterns and investigate concrete problems associated with researched phenomenon. Therefore the researcher prepared interview guides that are aimed at investigating phenomenon in greater detail. The researcher also tried to avoid bias and paid particular attention to the appropriate structure of the interview guides.

3.3.2. How the interviews were conducted

While conducting in-depth interviews researcher should be aware of several common obstacles that are stated in Easterby-Smith et al. (2013:136). The first major concern is that the researcher should focus on obtaining trust between him and the interviewee. In case of this particular research this is supposed to be done by sending transcriptions of the interviews back to the interviewees in order to receive approval for the material to be used in the master thesis.

Another important concern is how social interaction influences the interview process and the findings obtained. Easterby-Smith et al. (2013:136) For this reason, researcher tried to avoid asking organization-specific questions thus focusing on obtaining a general opinion about the studied phenomenon from the interviewee’s perspective. This will allow decreasing the suspicion level of the interviewees and therefore will reduce the bias.

Throughout the process of the interview the researcher tried to use “appropriate language” (Easterby-Smith et al., 2013:136) and not focused on using many theoretical concepts that can be unfamiliar to the interviewees, even though every interviewee was familiar with the concept of accounting materiality.

While conducting in-depth interview researcher focused on finding an appropriate location for doing so. Easterby-Smith et al. (2013:136) In almost all cases interviews have taken place in the offices of organizations that were included in this study. However, one interview was conducted at the University of Nordland and one interview was based on mobile phone

conversation. Nevertheless, the researcher assumes that location had a neutral impact on the interviewee's opinion and did not distort their point of view.

At the beginning of every interview the researcher asked the interviewees, whether or not it can be possible to record the interview. Easterby-Smith et al. (2013:136) Recording of the interviews was necessary due to the fact that the majority of the interviews were conducted in Norwegian language, which is not the mother tongue of the researcher. For this reason researcher needed to listen to the record after the conducted to make sure that he understood the information, which he was provided with correctly.

3.3.3. Limitations during data collection process

From the information provided in the empirical sections it is possible to concluded that selected organizations, namely ORG1 and ORG2 significantly differ in terms of size. Even though the researcher acknowledges that this factor has taken place he suggests that due to the similar structure of organizations and the same industry sector, where they operate it is possible to compare these enterprises. This idea is confirmed by the fact that BODM2 at ORG2 compares certain accounting information with financial statements from ORG1 in order to find material misstatements. This explained in a greater detail in the empirical findings section of this research.

While collecting data the researcher aimed at conducting interviews with board of director's members in both organizations. However, due to time-constraints and lack of human resources the researcher could not conduct interview with board of director's member at ORG1. For similar reasons the researcher could not conduct interview with external auditor of ORG2 from AORG2. Instead of that the researcher conducted an interview with the department leader of the AORG2, who provided him with the general policy used by external auditors at AORG2.

During the in-depth interview with the professional accountant from ACCORG2, due to absence of personal contact the researcher was unable to record the conversation with the interviewee. However, during the process of interview the researcher was making notes containing the main ideas and points used by professional accountant. Information, provided in empirical section is based on these notes.

Another important concern, which has to be addressed by the researcher, is that respondent #6 or CEO2 does not currently maintain a working position at ORG2. However, CEO2 maintained that position until January 2015 and therefore the researcher assumes that the interviewee is able to provide the researcher with an in-depth insight into organizational activities due to her extensive experience in this organization.

3.4. Data analysis

As proposed by Yin (2014:136) prior to analysis researcher should develop certain strategies, which are supposed to provide him with a clue of how to analyze received data. Yin (2014:136) continues that researcher has to rely on theoretical framework stated in the beginning of the research and use it in order extract some information from received data. On the contrary researcher can also try to examine data in greater detail to see, whether there are new concepts that emerge from the obtained findings. In contrast to outlined theoretical framework researcher can also develop certain rival theories that will provide him or her with contrasting perspectives that can be assessed throughout the process of analysis.

Discussion part of this research will be based on one main technique namely cross-case synthesis. Cross-case synthesis is a technique that is relevant only for the a multiple-case research Yin (2014:164) and it involves comparison of findings obtain from the cases, so that the researcher through the processes of examination, interpretation and analysis could find similar or different patterns that exist in both cases and thus could provide policy implications in conclusion. This particular research aims at cross-case comparison of materiality characteristics, which are viewed as significant by insiders and external auditors.

3.5. Addressing quality concerns of research: validity and reliability

According to Yin (2014:46) there are several common tests, which are used in order to assess the quality of case study as a research design. These tests are *construct validity* (whether or not researcher has measured the phenomenon correctly and whether or not he or she avoided subjectivism, while choosing appropriate measures of researched phenomenon), *internal validity* (whether or not relationships between two concepts established by researcher is valid), *external validity* (extent to which information, obtained from data collection and analysis can be generalized) and *reliability* (whether or not the results can be achieved by different researcher within similar setting). Due to the fact that internal validity has its main focus on cause-and-effect relationships it cannot be addressed in this exploratory research.

3.5.1. Construct validity

As stated in Yin (2014:46) to meet the construct validity researcher has to first define studied concept using publications, researches on topic and other official sources of information. Afterwards it is important to define an appropriate set of measurements, which describe phenomenon Theoretical part of this research also involves a framework obtained from standards on materiality of accounting information that lists certain qualitative factors, which shape this

notion and which are supposed to be taken into consideration by the external auditor as well as by the insiders.

Yin (2014:47) also suggests that to improve the construct validity researcher has to have *multiple sources of evidence*. This is described in greater detail in data collection section. Another method that can be used in order to increase the construct validity of given research is to maintain a *chain of evidence*- so it would be possible to trace the results of the research back from conclusion to problem statement. To do so this research has a clear, well-defined structure and researcher aims to follow formal requirements with appropriate citations, referencing and consistency of text.

3.5.2. External validity

According to Yin (2014:57), while conducting a multiple case-study due to repetitive nature of cases included in the research it is common to follow “replication logic”. Yin (2014:57). In order to achieve it the researcher tried to achieve pre-conditions to improve external validity, namely he targeted organizations from one industry that operate in the same geographical area and have adopted similar accounting standards. By following this “*literal replication logic*” Yin (2014:57) the researcher aims that empirical findings obtained from different cases will provide similar results that allow at least partial analytical generalization.

3.5.3. Reliability

To meet the reliability criterion the researcher will include interview guides that were used by him throughout the process of the data collection. Other information- such as methodological and theoretical framework will be fully provided in this research thus allowing providing other researchers with the whole scope of information, which is necessary to replicate given study and achieve similar results. Yin (2014:48) However, it is understandable that circumstances, which have taken place, namely personal experience of the researcher, time and place where in-depth interviews were conducted as well as personal background of the interviewees, cannot be replicated with an absolute accuracy and precision. Nevertheless, as stated earlier it is still possible to achieve similar results, while applying same methodological and theoretical approaches that are used in this study.

3.6. Summary

This part of the research has provided a detailed overview of philosophical assumptions that this study is based upon. It described the necessity to apply given research design in a particular context, introduced its constituent elements and structure and provided description of data collection methods and data analysis techniques as well as addressed traditional quality concerns of this research design type. With theoretical framework and empirical findings this part of the research provides groundwork for further discussion and conclusion.

4. Description of empirical cases

This section of the research contains a brief overview of the informational sector in Norway as well as describes the software-development organizations and the audit firms that were included in this study.

4.1. Information sector in Norway

According to Statistics Norway (2014) starting from 2009 and up to 2012 the whole informational sector has experienced growth. However, not all sub-sectors were growing that rapidly. As presented on Figure 5 sectors such as Content and Media, books publishing and other publishing activities, ICT- manufacturing industry, wholesale of information and communication equipment and other information service activities decreased in turnover from 2007 to 2012. However, in the majority of sectors and segments, namely in ICT sector in general, ICT service industries segment, programming and broadcasting activities segment, sound recording and publishing activities as well as motion picture, video and television segment and programming activities there is a substantial growth in turnover while comparing results from 2007 and 2012. This proves that a business research in this sector would be very likely demanded both by modern academics and practitioners that are interested in learning more about organizations, which work in this sector.

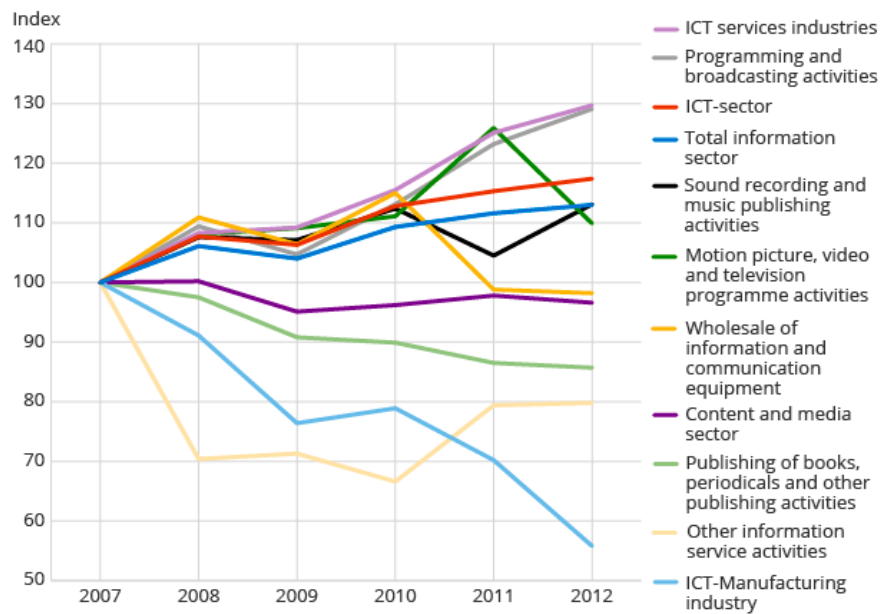


Figure 5: Indexed growth in turnover of various segments in information sector

Source: Adapted from Statistics Norway (2014)

4.2. Description of selected organizations

Information, which is used by the researcher in order to provide a general description of organizations that were included in the study, is based partly on the data, which the researcher, has been provided with, while conducting in-depth interviews. Besides, the researcher used various internet sources as well as organizational brochures. However, in order to preserve confidentiality of the organizations researcher will not disclose these sources and will not include them in the reference list. The researcher will outline approximate numerical information that will provide the reader with a brief overview over the size and the structure of selected organizations.

4.2.1. Case 1: ORG1 and AORG1

A software development organization #1 that is included in this study, namely ORG1 develops products for three large public customers in Norwegian Healthcare sector. Organization is more than 20 years old and during this time employees in this organization have developed extensive professional experience in terms of application of their software products to the needs of their customers. There are more than 75 000 users of organizational products across entire Norway. However, even through this organization has plans to expand itself currently it operates on the national level. From 2011 until 2013 organizational operating income has increased from approximately 200 to 300 million NOK. Due to the fact that organization has its plans to expand

starting from 2010 it has adopted IFRS accounting standards. ORG1 also aims to preserve high quality and uniqueness of their products. More than 60 percent of organizational shares are owned internally either by board of director's members or by its own employees.

ORG1 is audited by AORG1-a department of large global organization. Currently this audit firm is spread across the entire planet with more than 150 000 people and more than 40 years of experience both in auditing, consulting, tax and fee payments and business law. In Norway this organization has more than 20 departments in various cities. Norwegian department of AORG1 has experienced a stable increase in operating income from 2011 until 2013 with 1,1 to 1,15 billion NOK respectively. AORG1 aims at providing a high-quality and facts-oriented audit services and be an example for other audit organizations.

4.2.2. Case 2: ORG2 and AORG2

A software development organization #2, namely ORG2 sales, develops and provides maintenance services for two products, namely PRO1- a quality product that can be used by other companies in order to improve quality of organizational activities. Another product that was recently developed and adopted by this organization is PRO2- a cloud based accounting system, which simplifies the processes of measuring and recording transactions and other organizational activities. Organization was founded more than 15 years ago and currently has approximately 9000 users of their products. ORG2 operated on the national level. Starting from 2011 and until 2013 organization experienced a growth in operating income from 26 to 30 million NOK. ORG2 ensures high quality and uniqueness of their product. ORG2 has applied IFRS accounting standards. More than a half of organizational shares are owned by another investment organization.

The audit firm of the ORG2, namely AORG2 has departments in more than 150 countries. In Norway there are more than 1300 employees working in various departments. Organization provides services in external audit, taxes and fees as well as consultancy and business services. Starting from 2011 and until 2013 organization experienced significant growth in operating income from 700 million NOK to more than 1,2 billion NOK. AORG2 focuses on establishing long term and trust-based relationships with their clients.

5. Empirical findings

This chapter of the master thesis provides the reader with the empirical information, obtained by the researcher throughout the process of data collection. The chapter outlines perspectives of the insiders (MAN1, MAN2, BODM2, CEO2, ACC2) on the materiality

characteristics as well as perspectives of the external auditors (AUD1, AUD2) on the process of materiality establishment, qualitative considerations and quantitative aspects of materiality threshold.

5.1. Insider's perspective

5.1.1. The process of materiality establishment

Various materiality limits for different accounting statements

According to MAN1 materiality threshold establishment is not a highly structured process. It was emphasized that while establishing and assessing materiality employees in the organization tend to rely on their professional experience as well as focus on making a case-by-case assessment of certain accounting items as material or not.

“That is a very good question, because we actually have different materiality thresholds in different parts of accounting. In the balance for instance we have a higher limit than the income and the costs. I cannot say that we have a very structured process of establishing materiality level. It is more experience-based and more a case-by-case approach.”

Essentially similar findings were provided by the former CEO of ORG2, who also differentiated materiality threshold, established for continuing operations and materiality threshold for external financial statements:

“I løpende rapporteringer så rapporter man til styre og ledelsen i bedriften. Og der kan det være mer akseptabel skjønnsmessig vurderinger. Jeg vet at det kan være en del noe avvik og der vil vesentlighetsgrense bli større. Når du har offisiell regnskapet så har du null toleranse for vesentlighet also feil, som kan faktisk være vesentlig før omgivelsene på interessegruppe. Så fokus på vesentlighet er større på det offisielle regnskapet enn på den løpende driften.”

Matching accounting information in order to detect material misstatements

According to MAN1 in ORG1 the most common method to determine whether or not there has been a material misstatement, omission or over inclusion is comparison of accounting information in the organization with other information from other sources:

“For instance do you know the term “avstemming”? – It means that you check an account against something else. When we do that we get a result. If it is good- if it is zero then everything is correct then you do not need “vesentlighet” and it is okay. And if you get some discrepancies between the two then you say: “Yes, okay it is a ten thousand in a ten million dollar account- so who bothers?” I know that the auditors have a very structured process of deciding what they use as the materiality limit, but internally in «ORG1» we do not have that. We make it case-by-case.”

This technique is also used by the BODM2 in order to verify organizational turnover. Board of director's member also emphasized that it is very important to compare certain accounting information with organizational budget to see any discrepancies.

Matching of accounting information is also used by the CEO2 at ORG2, who focused on the "nøkkeltall" (key number or financial ratio) in order to determine materiality of accounting information. These "nøkkeltall" were compared either by using past history as a comparative basis or were compared with the budget of organization or future forecasts.

As stated by the MAN2 at ORG2 "avstemming" or matching is also used by ACC2 from ACCORG2 in order to see, whether organizational accounting is correct and does not contain material misstatements:

"Det er veldig greit for hun, som avstemmer regnskapet. Det er greit for å vite hva er transaksjoner, som var gjort, at vi sitter og gjør masse transaksjoner så må hun sitte og finne ut hvorfor vi gjør det. Så den feilen går der på en måte gjennom henne."

This information was confirmed by the ACC2 from ACCORG2, who compares financial statements with the information from banks and checks that accounts, provided by the company correspond to the tax and fee organizations (VAT, preliminary tax and employer's national insurance contribution). With this ACC2 ensures that the organization is complying with necessary rules and regulations from legal authorities.

Establishment of materiality as a continuous process

Due to the fact that in ORG2 CEO2's working position included responsibilities both of the financial director and a CEO she was involved in the continuous process of materiality establishment. However materiality threshold as a concept was neither mentioned nor discussed with the management or member of the board of directors. Therefore, materiality threshold was the responsibility of the former CEO, who had to make continuous subjective evaluations about what is material and what is not:

"Men som jeg sa tidligere i intervjuet, så har jeg ikke hatt så detalt på vesentlighetsgrense. Hvis vi hadde begynnt med styreleder om vesentlighetsgrense, så hadde vi satte tall på det. For det må vi forstå og bli enig om vesentlighetsgrense og der hadde vi nok satte en tall. Men når jeg vurderer vesentlighet i regnskapet så vil det være flytendes hele tida, fordi det er avhengig av periode og situasjon."

According to MAN2 organizational employees and professional accountant are constantly involved in the process of establishing materiality of accounting information. Therefore financial director confirms the notion that materiality establishment is a continuous process, which is based on professional experience:

”Vi gjør en vurdering hele tida. Er dette vesentlig. Det vil være noe vurderinger , som kanskje gjør man på erfaring i tidspunkt. Vi sier ikke at alt under fem tusen, for eksempel er ikke vesentlig likevel.”

Essentially similar findings were provided by the ACC2, who explained that materiality is established continually and varies depending on a concrete situation.

Materiality discussions with the professional accountant

Utilizing professional accountant’s capabilities

According to the CEO2 from ORG2 throughout her experience in this organization there were almost no discussions related to materiality, which would involve both CEO and professional accountant. However, sometimes due to time-limit CEO2 utilized capabilities of professional accountant to receive support and advice on materiality in the following areas:

”Det var spesifike lønnsområde. Det var veldig mye detaljer. Det var den regnskapsfører, som må regnskapsføre dette. Momsområde er veldig greit at regnskapsfører. Der har jeg brukt dem mye. Selv om jeg kan mye, men det er noe som dagligleder skal ikke ha tid for.”

As it was stated by MAN2 ORG2 uses services of professional accountant firm ACCORG2. In 2015 organization has launched a new product, PRO2- a cloud based accounting system, which it currently implemented at ORG2 and used by ACC2 as well:

”Dette er et system, som jeg kan bruke med laptop hjemme, jeg kan bruke det på iPad. Vi har den oppgaven- vi sprer ut inngående fakturer så sender vi til de som har bestilt for at de godkjenner dette, så alle på måte er med i prosessen av regnskap nå.”

The role of professional accountant at ACCORG2 is to control that organizational accounting is correct. However, professional accountant does not receive all accounting information and there are certain matters that are processed by ORG2:

”Nei, ikke alt. Vi har en vurdering, som vi kan vite , for eksempel en bonus kanskje en eksempel en kunde oss skal ha en bonus for noe vi kanskje har solgt på en salgs kanal hos oss. Denne informasjonen ser regnskapsfører ikke. ”

Verification of documentation

According to MAN2 discussions with professional accountant from ACCORG2 occur quite rarely. However, if they do occur, both participating parties usually rely on results, obtained, while conducting an “avstemming” or marching certain accounting information. Usually discussions occur, because professional accountant is not familiar with specific type of transaction and both negotiating sides have to conduct an assessment again:

”Det kan ofte være at vi har vært. Den informasjon, som vi ser på når vi får en bilag, som er ikke kjent for regnskapsfører og hun kanskje stiller spørsmål ved en transaksjon, fordi at hun ikke kjenner transaksjon. Det betyr du kan si at vi er uenig og vi bare gjør en grundigere vurdering.”

Amount of clients

During the interview MAN2 emphasized that sometimes professional accountant has too many clients and they are forced to increase materiality threshold:

”Det er klart at regnskapsfører har veldig mange kunder og veldig forskjellig kvalitet på hva kunder skal levere. Det er ikke alle, som bryr seg om regnskapet. De bare handler og styrer på. Helt kan de si:”Oy! Vi må faktisk levere noen offentlig oppgave, ikke sånt.” Og der hele gjerne et veldig stort rot etter det. Og der kan man komme i sånn situasjon der man må faktisk bare skjære gjennom. Sånne ting fra oss kan man si til revisor. Det finnes ikke og vi kan ikke dokumentere det. Vi må bare gjøre en vurdering av det.”

However, as stated by MAN2 this information cannot be applied to the current professional accountant of ORG2, because both employees and board of directors estimate highly the work of professional accountant from ACCORG2.

Materiality discussions with the external auditor

Trust-based relationships

According to MAN1 ORG1 has very stable and trust-based relationships with their independent auditor and even though there are certain differences that are related to their materiality policies they almost always agree on materiality threshold:

“I guess we have a more practical approach, whereas the auditor is tied up in his policy. And sometimes our practical approach has a little bit wider limits than the practice of the auditor. But actually it is very rare that we have these discussions. It happened sometimes and when it did I had to remind them that I thought that we said that the materiality limit was of a certain size. And then they say: “Yes, sure, okay.” So it is on that level.”

According to MAN2 employees at ORG2 also have built good long-term relationships with their independent auditor. In this organization the external auditor has a complete access to PRO2 and at any time can check any uncertainties by looking at the invoices in the accounting system.

MAN2 is not the only professional in ORG2 that focuses on establishing trust with the external auditor. According to the BODM2 he to a large extent relies on opinion of financial director as well as on capabilities of external auditor. The emphasis is put on using capabilities of these professionals:

“Ja, hvis jeg er usikkert så spør jeg økonomisjefen det vil være naturlig. Hvis det er noe ting, som skal plannlegges og gjøres og jeg er usikkert hvis det er lov å gjøre det eller blir det rett å gjøre det så kan jeg ta en telefon til min revisor og diskutere med ham. I stedet for økonomisjef. På måte sånt er det.”

Similar reasoning was used by professional accountant from ACCORG2. ACC2 stated that she is not experiencing any difficulties and differences in opinions between her and the external auditor of ORG2. If there is a misstatement that has been identified both participating parties are interested in finding a correct and legal solution that would satisfy everyone. Therefore there are not so many negotiations that occur between external auditor and professional accountant. Researcher was told that sometimes preparer tend to use knowledge of the external auditor in order to improve quality of her work.

Previous findings were confirmed by CEO2 and researcher discovered that materiality threshold is being a relatively rare subject of discussion between external auditor and the CEO. And even if misstatements do occur, the emphasis from both sides is put on finding an appropriate solution as quick as possible by looking through the laws and regulations of the area, where the misstatement was detected. However, CEO2 mentioned that sometimes inexperienced auditor tends to focus more on small issues and thus does not see the big picture:

“Så persjon, som ikke har mye erfaring er nødt å gjøre mer pirket jobb, for å rett og slett ha en forhold til vesentlighetsgrense. Og det tror jer handler om opplæringer. Så det er et spørsmål om det, som skal holdes internt hos revisor eller noen skal drirve å pirke hos kunden. Men det stemmer. Men, jeg tror at det er nødvendig å pirke. Det kan gjøres på revisjonskontoret.”

Low experience or knowledge about organizational activities

The rare cases of disagreement happened according to MAN1 when the assigned auditor was too young and had lack of experience and this influenced the quality of his or her work:

“Yes, I guess he misinterprets the context or he does not actually lift his eyes of the paper and sees where we are and what are we really looking for here, what are the risks in this transaction and what are we really trying to audit. Sometimes it can be lack of understanding of the business. “

MAN1 emphasized that an inexperienced auditor has his or her focus on the standards this sometimes does not allow him or her to “lift the eyes up and see the big picture”, where certain omission does not distort the true and fair view of accounting information. However, as it was emphasized earlier these small discussions do not take much time and usually were resolved quickly:

“I would not say negotiations. I would say that I pointed out my view on the matter on normally the auditor then says: “Okay, I understand.” It is okay. And just a couple of times he said: “I have to discuss it with my manager.” And I think once the manager contacted me and I presented the issue as I

see it and he said: “Okay, I understand. It is okay.” We never really have a big discussion or disagreement on this as far as I can remember.”

MAN2 at ORG2 also emphasized that due to the fact that he works as a financial director at ORG2 for less than a half of the year he is uncertain, whether or not employees at organization discuss certain matters with external auditors. However, MAN2 stated that it is very likely that these discussions happen due to the fact that external auditor is not present at ORG2 on a daily basis and therefore can be not familiar with methods and estimates used to establish materiality of certain accounting items:

”Men det er ikke sånt at våres revisor har ingen erfaring i revisjon. Det kan være at de har mindre erfaring på regnskap og vurderinger hvor ting skal føres i regnskapet, som kan være problemstillinger.”

Moreover, MAN2 added that sometimes external auditor tends to have a lower materiality threshold for insignificant accounting items, because he or she is not familiar with the structure and internal activities of organization:

“Så der kan vi se forskjell på en revisor, som sier at ja, vi er fornøyd eller nei, dette er absolutt en feil og vi må pirke videre hvor mye skal det være. På måte vi er aldri ferdig med sånn type regnskap, hvis vi skal finne alt. Det gjelder ikke oss nå, men det kan gjelde, siden vi snakker om revisjon.”

External auditor’s authority

However as explained by MAN2, sometimes employees have to comply with these requirements and wait until all uncertainties are clarified, because of organizational dependence on the auditor’s recognition:

”Noen ganger man blir avhengig kan du si på en måte at revisor signerer på papiren. Revisor skal signere på en papir, som er et godkjent regnskap. Så må man på måte påuse at vi sikkert er enig.”

5.1.2. Quantitative factors that affect materiality

Effect on income

The main quantitative factor that was outlined by MAN1 was the effect of materiality on the bottom-line numbers. The main emphasis was put on the bottom-line number, because it was emphasized by the board-of-directors:

“Because that is what my board of directors is mostly concerned with. And I do not want to get it wrong. But of course if you look at it the legal thing is actually above that. But for me in the day-to-day basis my first thought is how this would affect our bottom-line. But if you would look at its structure I would probably range what is decided by law. That is typical tax forms, rules and regulations. And of course “en god regnskapskikk” is also important to follow.”

The view of MAN1 is supported by the BODM2, who also emphasized the impact of material misstatement, omission or over-inclusion on large accounting items such as income from sales and salary:

“Sånt at min oppgaven er å se på de store tall. Vi ser på salgsinntekte og hva er en sum av salgsinntekte. Også ser man litt på fordelinger men i hovedsak på sum. Også er det lønn, som er viktig i forhold til det vi har budsjetert og sammenligner gjerne med det, som vi har budsjetert. Og hvis det er en stor avvik der så må man stille spørsmål.”

According to BODM2 the most important factor is the impact of the misstatement or omission on organizational turnover. This information is also viewed as important by ACC2, who takes into consideration the impact of the misstatement on the income.

Effect on transactions with customers

While making materiality evaluations MAN1 explained that he was very concerned with the effect of materiality threshold on transactions with customers to meet their demands:

“That is what I have mentioned above about the customers and if they get affected. «ORG1» is a company with a few but extremely large customers. For instance our biggest customer- “Health region of South East”- an area around Oslo- around fifty percent of our income comes from them. So of course we have to be very particular that we meet their demands in every way so that they do not get dissatisfied with «ORG1»- that would be devastating for us if they were to go away as customers. So that is important.”

Accrual accounting items

During the interview MAN2 explained that one of the most important factors, which he takes into consideration, while making materiality assessment is the accrual component of accounting information, that is to what extent the costs and expenses are distributed over time:

”Og det er også at når vi periodiserer ting sånt som er forsikning som er utbetalt for et år så koster tre tusen kroner i år så er det ikke vesentlig post i regnskapet våres at vi skal ha tre hundre kroner i måned.”

This information was supported by ACC2, who also stated that it is of high importance to verify, whether the chosen cost allocation over time was done in accordance with accounting and tax regulations.

These findings were supported by the BODM2, who stated that in order to be considered as material misstatement or omission have to be improperly allocated over time:

”Også hos oss du vet at driver med data. Og der faktureres alle veldig store inntekter i januar måned allerede for hele året. Og hvis vi ikke har periodisert de inntekte, så vil vi ha en kjempesultat i

mange mange talle, som vi har i januar og lav resultat i alle andre måneder. Så tall vi inn på forskyddet er typisk periodisering og det er nødt til å gjør ellers blir regnskapet feil.”

Size of accounting item

Another quantitative factor, which was emphasized by MAN2, is the relative size of the accounting item, which would influence materiality considerations:

”Så omsetter man hundre millioner er ikke hundre kroner vesentlig. Men kanskje, hvis du har en omsetning på en tusen kroner, så er kanskje hundre kroner plutselig vesentlig. Så det er størrelse, som på måte sier at det er vesentlig.”

Essentially similar concerns were provided by the BODM2, who stated that in order to be considered as material, misstatement or omission have to be significantly large. Supporting above-mentioned findings ACC2 explained that it is also of high importance to conduct a proper evaluation of significantly large costs in the organization to assess, whether or not there are any material misstatements.

Financial ratios or key numbers to determine materiality

During the process of interview CEO2 explained that throughout her working experience as a financial director it was very common to use “nøkkeltall” - a key number calculated on the basis of the information from the financial reports. There were different types of the “nøkkeltall” utilized by the CEO2 in order to assess, whether or not the chosen materiality limit was appropriate:

”Så min rolle var en økonomiansvar og der hele tida så brukte jeg nøkkeltall. Det var to nøkkeltall, og det var egentlig vekst på omsetninger også var det kundefordinger. Og der var det de, som delene det regnskapet har du fokus på, fordi at alle andre kostnader de var fast. Så det var på måte greit. Så det var vekst på omsetninger og hvis det er en vesentlighet der så er det om hvilke nådde de måle de skulle. Så vurderte jeg hele tida og hadde ei vesentlighetsbetraktning i hode mitt hva slags forventning har det i vekst denne måned, den siste måned, det siste halvåret.”

5.1.3. Qualitative factors that affect materiality

Insider’s personal characteristics and experience

MAN1 stated that materiality threshold is largely influenced by personal characteristics and it is considered both as an advantage and disadvantage:

“Particularly since we have no structured regulations in «ORGI» on this my personal experience will very much influence that. That is a weakness, but at the same time it is strength when it comes to

deciding fast and just feeling what is right but it is a weakness when it comes to documenting why you decided that that was the materiality limit.”

Personal experience of MAN1 seems to a large extent affect materiality threshold and sometimes this can result in wrong evaluations:

“As I said we do not have this very structured documentation process. The trade-off is of course that we could sometimes evaluate it wrong; because it is based on the gut-feeling and gut feeling is not always right, even though it feels like it is right every time. So that is of course the most important trade-off.”

However, in terms of accounting the business of ORG1 seems to be quite cleat-cut. Organization receives more than ninety percent of its income from three large customers. So if organization has long-term and stable partnership relationships with these three large customers it will be sufficient to make materiality evaluations, relying only on the “gut-feeling”:

“On the other hand since we are fairly easy company, when it comes to accounting- we have four or actually we have three large customers and a certain number of small ones. So if we have control over the big and large customers we have control of perhaps ninety-seven or ninety-eight percent of our income. So what happens with the last three percent is not really that important. So therefore we focus on these large customers and I feel that we do not experience many issues even though theoretically there are some trade-offs.”

As it was stated above in terms of accounting and business in general ORG1 is situated in relatively stable conditions. The organization receives its income from several different sources. One of these sources of income is consultants, who are involved in teaching the employees of the clients, who have purchased certain products of ORG1, about the use and implementation of the products in order to uncover their full potential. The consultants follow a procedure of recording how much working time they have spent and record this information on a time-sheet, which is used as a basis for the invoice. The customers always have the possibility to check whether or not everything is correct, by matching their records with the ORG1 records. Therefore, accountants and clients of this organization rely on this system and after certain time can develop professional experience and “gut feeling” that can be used to detect discrepancies.

Another main source of income is when customers are buying any of ORG1 products- to gain complete access it is required to pay for the license fee once as well as for the maintenance fee, but on the annual basis. MAN1 emphasized that the main customers of ORG1 are relatively large and stable and therefore the only thing that can change is if they will buy more products from ORG1. Therefore the materiality threshold does not seem to vary from year to year. On this matter the interviewee concluded the following:

“Therefore, when it comes to the gut feeling or the materiality limit that we first establish for the entities that became customers of «ORG1»- we can just keep it rolling as long as they are there. On the

three largest customers, which contain ninety eight percent of our income it is pretty easy to keep control. And we send four invoices per year per customer so it is not a lot of invoices either. We have no balance; it is only "kundefordinger" and the "offentlighet", so we have no long-term debt and no risk from customers not paying, because they all are public customers."

According to BODM2 his knowledge and perception about materiality of accounting information are also to a large extent dependent on his past professional experience:

"Så jeg har lang erfaring- tjue år med regnskapsbakgrunn. Så i forhold til det, så hvis vi skal snakke med deg om vesentligheten så du kan si at jeg har lært om det gjennom min tid der. Og før det var jeg en revisormedarbeider og fikk innsynn i veldig mange forskjellig typer regnskap."

Essentially similar concerns were explained by the CEO2, who emphasized that her personal characteristics to a large extent influence materiality considerations, because of an extensive auditor background. Former CEO is uncertain whether or not this will influence the final level of materiality, which will be presented to top-management and board of directors. However, professional background as an auditor has certainly provided CEO2 with a more detailed and coherent picture of how materiality threshold should be established and evaluated. Therefore CEO2 used advices of external auditor much more rarely than those, who did not have such an extensive background as an auditor.

Knowledge about enterprise, its activities and employees

The CEO2 explained that during her past experience both as a CEO and as a financial director at ORG2 she was mostly relying on her deep knowledge and understanding of the business and organizational activities:

"Som dagligleder så kjenner jeg bedriften så godt der er det så mange andre vurderingselementer, som skal gi læring om vesentlighetsgrense. Som revisor så kjenner man ikke bedriften så godt så der vil vesentlighetsgrense tatt utefra momenta gjennom en analyse og sånn og sånt er vesentlighetsgrense. Så jeg tror ar det handler om kjennskap om nærheten til drifte."

The member of board of directors at ORG2 also stated that due to his in-depth knowledge about organization and its activities he is able to detect certain bias relatively quickly and thus resolve it either with external auditor or with the management personnel at organization:

"Jeg har ikke behøver å analysere enkelte poster, fordi det er en ansvar av revisor og vi har en revisor. Når man er mer dypt i bedrift så har man forhold til hvert år og gjennom året så ser man regnskapsrapporten veldig fort om det er noe ting, som er avvik som man tenker å stille spørsmål."

These findings were confirmed by MAN2, who stated that the amount of different estimations and assessments will vary depending on how much in-depth knowledge about internal processes and activities in organization the person has:

”For eksempel, vi kan finne alle dokumentasjon i våres eget regnskap. Det er mye lettere, enn for noen, som sitter som regnskapsfører. Så vi har ikke så mange uavklarte poster nå. Men det er klart at, som regnskapsfører eksternt, så har du mye mindre innsynn i regnskapet egentlig, fordi du får informasjon fra utside.”

Risk assessment

As a member of board of directors BODM2 carries responsibility for both and long term strategic actions of organization. Therefore, while assessing materiality of accounting information he is forced to do risk assessments:

”Det er klart at i min jobben, som styreleder det er risiko hele tida: har vi nok inntjening, har vi nok til å betale lønn, er vi likviditert nok til hva vi skal gjør.”

According to BODM2 it is of high importance to ensure both that accounting information used for internal and external reporting is correct:

”Så det er ikke bare resultatmessig delene i regnskapet, det er også de finansielle delene av regnskapet at vi går gjennom. Det er ikke bare kostnader og inntekte det er også viktig å se at penger står i banken.”

However, while assessing risk of material misstatements the main emphasis of BODM2 is put on minimizing expenses in order to achieve desired result:

”Også vurderer vi i tilfell at vi skal gjøre investeringer. Vi skal flytte snart og vi må ha rom for å gjøre investeringer, nye lønn og utstyr og sånt. Og der er det vesentlig i forhold til å ha vurderinger til beste tilbud hva er krona for et bra resultat.”

The former CEO at ORG2 was also involved in the process of evaluating the risk of material misstatement. At ORG2 accounting was in most cases responsibility of certain specific employee as well as representative of professional accountant firm. CEO2 had a good overview of knowledge and capabilities of these employees and therefore adjusted the risk according to their performance:

”Vi skifter regnskapssystemet for et år siden, når vi tok PRO2 og der var det en intern, som skal begynne å jobbe og hadde ikke erfaring på den jobben, som han skal gjør. Der måtte jeg gå inn på mye mer kontroll for å opplære i næringsfasen. Også kunne jeg slippe taket litt etterhvert når jeg hadde kontroll at hun hadde kompetanse til å strekke det. Så risiko var periodisert med hennes kompetanse.”

Opinions of management, professional accountant and external auditor

According to BODM2 he does not have any strict regulations on how to assess, whether presented materiality threshold is established correctly or not. BODM2 noted that it is not his responsibility to focus on the details of accounting and assess, whether or not the chosen materiality threshold is correct and in this case it is very important for him to rely on the

competences and skills of financial director in organization as well as on external auditor and partners from professional accountant firm:

“Vi har en god regnskapsfører og vi har et regnskapskontor. Også har vi en god revisor, som etterprøver at alt er i orden både med ISA 320 og ISA 450. Så du kan si at for min del, som styreleder der har jeg godt miljø rundt meg og så lenge de stoler på det så du kan si at jeg graver ikke så dypt i vesentlighetsgrense.”

Laws and regulations

As described by MAN1 ORG1 is situated in relatively stable conditions and remains almost unaffected by external environment and circumstances, because their income is largely dependent on several public customers, which are located in the public sector. This is the reason, why organization always receives the money from the clients and there is no risk of financial distress. And even though if there would be some problems, such as reduced funding from the Norwegian government that would affect the main customers of ORG1 this would not change materiality threshold:

“What of course could happen is that if the Norwegian hospitals were to get reduced funding from the Norwegian government, because of the oil prices fall or something like that would of course affect our business, but I do not think that it would affect our materiality evaluations. The risk will be the same. When we have bought something there is no risk that we will not get the money and the business will not be different. One thing that can be different is the risk that we will have less income, because our customers will buy less. That is another risk and it does not affect our materiality evaluations as I see it.”

It was as well stated by MAN1 that ORG1 has its plans for further expansion into other countries:

“So I would say that today these matters do not affect materiality limits, but we have plans for the future to go abroad for instance. That would of course very much affect it. We will have to establish new limits for everything that happens outside of Norway or to types of customers in the Norwegian public sector.”

As it was emphasized by MAN1 organization has its plans to go abroad with a subsidiary. In that particular country organization will have to comply with national accounting and tax regulations and adjust their materiality threshold in accordance to them.

Product sales

According to MAN2 due to a large amount of customers and type of products, which are sold organization is not exposed to any kinds of external influence:

”Vi har relativt stabilt omsetning. Den svinger ikke mye fra år til år med de produkter, som vi har, som vi hadde bare kanskje litt hvert år. Så vi har ikke noe sånt, som uansett påvirker informasjon i regnskapet. Jeg tror ikke at du kan si at vi har miljøpåvirkninger, som påvirker regnskapinformasjon. Det er klart at hvis alle skal slutte å bruke produkter, som vi har så skal det påvirke oss.”

However, financial director noted that organization is very dependent on their products, due to necessity to pay the salaries to product developers and other employees:

”Produkter, som vi utvikler påvirker resultater, hvis vi har noe ikke har inntekter på det vi gjør, Vi har store kostnader, vi har en hel etasje som sitter der og jobber og hvis det er ikke nok inntekte så det påvirker regnskapet våres. Det er sånt selvfølgelig.

MAN2’s reasoning was confirmed by CEO2, who explained that the external factors, which affect organizations usually, depend on every particular organization, its structure and environment, in which it operates. An example, presented to the researcher was the fishing industry in Norway, where in certain time-period there were significant fluctuations in terms of salmon prices. However the business of ORG2, according to its former CEO was not strongly exposed to environmental circumstances:

”Når det gjelder ORG2 så er det ikke så mange eksterne faktorer. Det var enest salg og kundetilfange. Så kan du si at det er en vekst bedrift og de har fokus på omsetning så vil det være naturlig å ha fokus på salgsområde.”

As it was mentioned by CEO2 before 2015 organization used to work only with one project. The income that they were receiving from accounting firm was fixed and thus almost totally independent from their customers. The only risk for the organization would be if all its customers would suddenly go bankrupt. However, when it comes to PRO2 CEO2 emphasized that there are can be certain environmental influence:

”Mens for PRO2 så vil det være noe annen, fordi at der er en salgskanalen det er regnskapskontoret, som selger PRO2 til sine kunder. Så der vil inntektpotensiale til ORG2 bli avhengig av hvordan de gjøre det med sine kunder.”

Information from other organizations.

According to BODM2 materiality limit is to a large extent influenced by external factors due to the use of “avstemming” or matching technique and comparison of accounting information with publicly available financial reports from other organizations working in similar or the same industry such as ORG1:

”Sånt er det at i dag alle regnskapstalle er åpent og tilgjengelig på net. Stort sett i de fleste bedrifter. Så det er veldig lett å sammenligne med andre. Sånt at med det er det viktig i forhold til strategien våres.”

Board of directors and department leaders

In terms of users, which are affected by materiality MAN1 distinguishes three large users-groups: internal employees in the organization, board of directors and the rest of the society or stakeholders such as customers, shareholders and the public. MAN1 has emphasized the following differences between these three user-types:

“And of course the materiality limit for internal users is lower than for the other two. I would say that the board of directors and external stakeholders is actually the same, because they only look at the “årsrapport” and the financial statement, whilst internally we have a lot of other reports and accounting information that is presented with a higher level of accuracy, because it is used for steering the company.”

MAN1 has also stated that people from board of directors have usually an in-depth knowledge about structure of the business, its activities, risks and materiality evaluations. When it comes to external users MAN1 emphasized that financial report is the only source of information, which they receive and consider it as a trustworthy representation, whereas it is usually necessary to have an in-depth knowledge about the business and its activities to get a holistic overview of the situation in the organization. However, the business of ORG1 can be considered as a fairly easy process in terms of accounting and there is very little subjective evaluation, which is used throughout the process of financial statement preparation. For this reason there is not so much difference between the person, obtaining insider knowledge and external user of financial reports.

As a person, which is responsible to provide financial information MAN1 has his main on focusing on internal users of accounting information. However, it was as well added that external users would probably consider board of directors as the most important user of financial reports, because they represent external stakeholders.

The difference between the three different user-types is reflected in the type of accounting information, which they receive: the public is provided with the information from financial statements; the board of directors receives more detailed information about internal activities. And when it comes to the leaders of every department the information is differentiated in the following way:

“And internally we differentiate the information to the different leaders. So the leader of the development department gets a lot more information about the development and about the teams and how they work and how effective they are, whilst the leader of the consultancy department gets more information the hours they make and the customers and so on and so forth. The development department really has not any relation to the customer- they have a backlog, which they are supposed to deliver. And

it is not their responsibility to roll this out at our customers- that is responsibility of the consultancy department. And that of course generates needs for different kinds of information.”

As stated by MAN2 materiality of accounting information is to a large extent dependent on those, who will be using the financial statement. The financial director at ORG2 continued that there will be different limits of materiality in financial statement and internal reporting depending to whom accounting information will be reported:

”Så kunne jeg sette, det er et resultat på den summen der. Det er kanskje nok for det, for å vite hvordan gjør de det. Men hvis jeg skal rapportere til en kontroll, for eksempel, som skal gå over og kontrollere så kanskje de skal bli inn på våre enkelte poster for å se at det er for eksempel husleie er den rett eller ikke.”

MAN2 has its main focus on the board of directors, CEO and departments administration. Due to the fact that organization is not listed on any stock exchange market it does not prioritize any external users of accounting information:

”Eksterne brukere får ikke tilgang til regnskapet annen enn ofisielle regnskapsinformasjon, som er et årsregnskap, som du kan hente ut på nett eller kan du bestille. Men vi rapporterer ikke noe eksternt og vi har noe plikt å rapportere til børs for eksempel, så vi har ikke noe annen på det. Så det holder med årsregnskapet for oss.”

According to ACC2 while establishing materiality it is important to take into consideration users of accounting information. The main group, which is considered as the most important by ACC2 is the board of directors. However, professional accountant does not need to present information directly to the board of directors. This is a responsibility of financial director at ORG2, who is the first to receive accounting information from ACC2.

General considerations on discretionary items

High risk of making a wrong evaluation

As it was demonstrated by MAN1 ORG1 has a quite simple business and therefore accounting model. In general organization pays more attention to discretionary items in its balance and has a lower materiality threshold for them. MAN1 stated that having a low materiality threshold for discretionary items is possible, but the value of it will not be of a large size.

The reasoning of MAN1 is confirmed by CEO2, who stated that there are differences in terms of how materiality threshold is established for discretionary and non-discretionary accounting items. In non-discretionary items, misstatements can occur mostly because of the error in the system, so therefore the risk of making a misstatement will be lower and as a result of that materiality threshold will be higher for non-discretionary accounting items.

Reliance on opinion of management and external auditors

During the interview with BODM2 the researcher found out that while assessing discretion in certain accounting items board of director's member tends to rely heavily on opinion of management and external auditors:

"Men uansett på de skjønnsmessig så er det klart at man må gå inn og stille spørsmålet hvorfor blir det så stor her. Hvis du forventer noe, så må du stiller spørsmålet om det."

IAS 38:57 Development phase

Established rules and regulations

MAN1 emphasized that organization currently does not have any kind of discretionary items, where there is much subjectivity, expect one accounting item in IFRS, namely IAS 38:57 Development phase. This standard was adopted by ORG1 in 2010 and before that organization did not activate any of its products. However in the current period organization has to decide what amount of the yearly costs to activate, while it is being transferred into the balance. As MAN1 explained there were some criteria, established in ORG1 on how to do this:

"We have established some rules and regulations on how we supposed to do this and there are actually some pretty clear criteria, when a project has gone from research into a development phase, where all of it or some of it has to be activated and we try to follow that, but of course there are some valuations and considerations that have to be done, when deciding that is so mature that you can say that it is actually generating or it is likely that it will generate cash flow then you have to activate it. And there we had some discussions with our auditors on where to set a limit and how to evaluate this. But I feel that after the first this settled pretty good and I do not consider this as a challenge- not internally and not against our auditors."

Safety principle

According to MAN1, while making decisions on this discretionary account it is important to focus on the "forsiktighetsprinsip" (or safety principle) that they try to follow. MAN1 added that employees in organization try to be as much conservative as possible, while evaluating the values of the development. However, as it was emphasized it is never possible to be absolutely sure whether conducted evaluations were correct and thus it is impossible to fully avoid bias:

"However, as with everything in the end it always comes down to a person who says if these criteria were met or not. That is the subjective part. You cannot really decide that objectively, because it is in the future. You have to decide- is it more than fifty percent likely that this product within the next year will generate cash flow? And then you have to evaluate if it will be possible to finish in time, will the product that creates customer satisfaction be created- so the customer will actually pay for it and use it? And of course you have to evaluate that in the future and that is difficult. So, yes it is subjective."

Personal experience and contact with product development team

According to MAN2, while conducting an evaluation of what part of project to activate employees usually tend to rely on personal experience, but at the same time are kept in touch with employees at ORG1, who are directly involved in the development of the product and its maintenance. During the process of discussions, evaluations and receiving an in-depth knowledge about the features of a product they have a feel of how long the product is going to last and how mature it currently is.

Discussions between board of directors, members and external auditor

As emphasized by BODM2 to choose what part of the project to activate and to put into development phase board of directors members organize a discussion on that matter between them, management and external auditor in order to make a correct evaluation:

”Også blir det en samspill mellom økonomisjef og kanksje med meg og med revisor og vi tar stilling hvor mye er det, som skal aktiveres og hvor mye skal direkte føres i dette året. ”

Evaluation of project viability

Concerning development phase of the project, CEO2 explained that it is important to understand in what kind of phase you are in a particular project. For instance, for PRO2- a project, which development began more than three years ago, the research phase lasted approximately half of the year. And after that they began to activate the project and move it from the research phase into the phase of development based on the following evaluation:

“Og den vurderingen gjør vi utfra risiko for at prosjekten blir skrinlagt. Så vi må gjøre en vurdering i forhold til hva er det, som vi er sikkert på det helt prosjektet er levedyktig. Men dagen kun vi med sikkerhet si at helt prosjektet er levedyktig. Vi satt så videre. Der på måte begynner vi å aktivere.”

Accounts receivable

Evaluation of possible future corrections

CEO2 emphasized that she used to make an evaluation of what kind of possible corrections it can be necessary to make in the annual statement at the end of the year. CEO2 described accounts receivable as the most important discretionary item for ORG2:

”Hvis det på måte løpende er mye tap på kundefordringer og jeg ikke har fokus på det så kan det bli vesentlig feil når vi kommer i årsoppgjør og der blir det en øvrraskelse. Så i den løpende så er det viktig å ha en fokus på de viktig skjønsmessig poster. Hvis varelager ligger der statisk fra inngaende balanse til utgaende balanse så gjør du ikke justeringer. Så er det garantert at du får en stor justering i årsoppgjør, som du ikke har hatt kontroll på. Så der er det min, som dagligleder må ha fokus på de skjønsmessig vurderinger og ha lavere vesentlighetsgrense der løpendes.”

On the contrary as it was emphasized by BODM2 currently ORG2 does not experience large losses on accounts receivable due to absence of problems with clients. The users of PRO2 product are obliged to renew their membership in order to have the purchased product working.

”Akkurat nå så har vi utrolig lita tap på kundefordringer. Vi fakturerer tidlig på året og det var sånn at hvis kunden ikke betaler så stopper programme. Og kunder de er avhengig av programmen så egentlig går inkassoen av seg selv. De er nødt til å ha programme. Så vi har faktisk utrolig lita tap på kundefordringer.”

Despite the fact that there are not so much losses on accounts receivable board of directors member compares, whether or not there are certain discrepancies between the actual amount and the way it should be:

”Man ser hvor stor den posten utestående i kundefordringer er i forhold hva er burde vært. Så det er riktig for kundefordringer likevel.”

BODM2 continued that ORG2 established payment for product on an annual basis and the payment term for the clients is approximately one month:

”Det er sånt at vi fakturerer de store inntekte tidlig i januar og sånt. Også er det at i mitten av februar så må det være betalt. Så det er litt over en måned. Du kan si at gjennom halvmåned så har de ikke betalt men vi gjør den beste vi følger opp. Også betaler alle fleste inn det.”

In terms of sources of information used for verifying whether or not there are some discrepancies in accounts receivable CEO2 has mainly relied on special technical invoice system used in the organization, where it was possible to see through all the invoices issued:

”I faktureringsystemet skal du få alle rapporter. Og der er det en rapport, som heter aldersfordelt kundefordringer. Så får du opp alle kundefordringer spesifikk og hvor gammel de er. Om de er null til tretti dager gammelt eller tretti til seksti. Og denne er veldig greit å bruke, fordi der kan du bruke en kolonne, som heter seksti dager og mer. Også tar du en rask gjennomblikk og ser der det noe, som har tapspotensial. Og det er egentlig greit å fa et rapporte fra.”

MAN2 at ORG2 also uses PRO2 in order to verify, whether or not there are some outstanding positions in accounts receivable. He stated that ORG2 is responsible for the evaluation of accounts receivable and does that due to necessity to expect the payments from their clients. In this case organizational employees use information from their accounting system as well:

”Men der gjør man uansett en vurdering ut fra et rapport, som viser det. Her i regnskapsystem det har vi. Hvis man tar en rapport for kunden- så vi må se her alt, som er over nitti dager gammelt- den ting, som skulle være betalt på mer enn nitti dager og det vil være, som tap.”

Depreciation of intangible assets

Professional experience

According to MAN2 depreciation of assets at ORG2 is dependent on accounting and tax rules and regulations. However, there are certain matters, where organizational employees have to rely on their experience. The researcher was provided with an example of depreciation of PRO2 as a project. In this case organizational employees will have to determine what parts of the project will be included in the balance and will be activated as well as it will be necessary to determine an appropriate depreciation time for the project to depreciate due to the fact that it has to be further developed to be competitive and profitable in the future:

”Så dette prosjektet, som gjør vi nå ser vi der, at vi må avskrive fem år, fordi at et system må videreutvikles, endres. Om fem år så må vi gjøre noe mer så det er fornuftig avskrivningstid, som vi selv har valgt på denne ene.”

Choice of depreciation model

According to Norwegian law organization has to use two approaches on how to depreciate its assets. The first is based on tax regulations (skattemessig) and the other is based on the accounting (regnskapsmessig):

”Også skal dette avskrives der over fem år eller en saldo på tjue prosent for eksempel. Ja, sånt skattemessig og regnskapsmessig avskrivninger. Jeg vet ikke om du kjenner forskjellen på det. Skattemessig avskrives over tjue prosent, men i regnskap avskriver vi over fem år. Det er litt som forskjellig mellom regnskapsmessig og skattemessig vurderinger.”

As stated by MAN2 at ORG2 employees use linear depreciation method for the accounting regulations and balance method for the tax regulations. It was as well added that, while making depreciation evaluations it is very important to make a correct assessment before the depreciation, because of the possibility to report incorrectly wrong throughout the whole depreciation time:

”Ja, i begynnelsen, også kan du si at det er en feilvurdering, som er tre millioner feil faktisk skal ikke være avskrevet kanskje i året likevel. Det sier jeg for eksempel. Det vil du ha nye tall på et ganske stor feil på slutten av året, som der må korrigeres her. Så sitter vi og rapporterer feil hele veien. Så det er det på måte at i 2016 ser du en feil. Så hvis det er vurdering, hvor jeg er usikker eller har det stor konsekvens, så gjør jeg det på nytt. Nå er det en dialoge med revisor om prosjekte, fordi de har så stor størrelse at vi snakker tre fire millioner.”

Therefore, while assessing depreciation of assets the main focus of MAN2 will be put on the size of possible misstatement as well as on the consequences in relation to the size.

According to CEO2 before 2015 ORG2 had only one project in sale, namely PRO1, which is a quality control and time-management product. While assessing depreciation of this

project organization used the “kostnadsført” depreciation method, which should be used according to Norwegian accounting law (“regnskapsmessig”). However starting from 2012 organization began to develop PRO2- a cloud-based accounting system and all development costs of this project were assessed based on the “balanseført” depreciation model, a model, which is necessary to use according to Norwegian tax law (“skattemessig”). During the interview CEO2 stated that even though one might end up with the same result using each of these models- there is a substantial difference between them. However, for these types of projects, such as PRO2 it is important to lower the materiality threshold both for the “regnskapsmessig” and “skattemessig” depreciation models. PRO2 as a product is depreciated starting from beginning of 2015, when it appeared on the software market. CEO2 is currently not maintaining the working position of CEO at ORG2, so therefore she could not provide the researcher with any comment, concerning the current depreciation method used. However, she emphasized the following criteria, while choosing an appropriate depreciation model:

”Men det blir vurderinger av hele tida hva tenker vi, hvor lenge tida PRO2 har og allen jobben, som gjøres på prosjekten, de systemutviklere- det er de, som sitter og gjør og andre, som leverer inn. Det må vurderes, om det er et vedlikehold av den produkten, en programvaren, som er i salg eller om det er en ny utvikling, som skal balanseføres. Og det blir kjempeviktig i forhold til den løpende av regnskapet til ORG2.”

Time of depreciation

BODM2 stated that while assessing an appropriate depreciation time his main focus would be on the accounting (regnskapsmessig) model due to the fact that following tax (skattemessig) model, which focuses on relation to Norwegian tax rules is the main responsibility of external auditor and professional accountant:

“Det er utrolig vanskelig å sette. Vi har et system i Norge, hvor vi har en regnskapsmessig og skattemessig. Men jeg vurderer det ikke så mye de skattemessig, fordi jeg tenker at det gjør revisor og regnskapsfører. Men de regnskapsmessig avskrivinger, de linære som skal løpe hele år det vurderer man.”

In every particular case employees in organization make an approximate evaluation of what depreciation time is the most appropriate for a particular item or asset. However, BODM2 stated that evaluation of the intangible assets can be even more difficult. Organization has recently developed a project PRO2. While developing a project the main emphasis of BODM2 was put on lowering the costs and at the same time achievement of customer satisfaction. However, this can become very difficult due to the fact that in reality organization usually has large expenses related to tax authorities. All these factors make the estimation of depreciation time very difficult:

”Og den største usikkerheten, som vi har, den ligger der, hvor mye koster skal vi tenke for få den her produkten at de kunden si at det er bra og de er fornøyd med det. Og det er nesten alltid sånt at det drar på mer kostnader enn det man har tenkt fordi det er så mye skatt.”

Organization- specific principles

While asking CEO of ORG2 about depreciation assessments it was stated that evaluation of assets depreciation is a subjective matter, because of necessity to evaluate the expected lifetime of an asset. Even though lifetime evaluations are discretionary there are certain principles for every group of asset that are followed by organization, while assigning certain lifetime to a specific asset.

Compliance with laws and regulations

During the interview with professional accountant from ACCORG2 the researcher found out that professional accountant focuses on whether or not the organizations has complied with laws and regulations, while estimating time and amount of assets depreciation. It was noted that ACC2 analyzes organizational compliance both with accounting (regnskapsmessig) and tax (skattemessig) regulations.

5.2. External auditor’s perspective

5.2.1. The process of materiality establishment

Materiality manuals and guidelines

AUD1 from AORG1 emphasized that there are some rules of thumbs used as the method on how to establish materiality of accounting information. These rules of thumb are summarized in a specific materiality manual.

AUD2 at AORG2 also base their materiality decisions on specific rules and regulations, which are summarized in a specific document. Moreover during the interview it AUD2 emphasized that there are certain guidelines, related to the industry on how to establish materiality threshold:

“Du kan si at det er en retningslinje for hver bransjen. Hvis for eksempel det er en handelsbedrifte så er det på en måte mer omsetninga, som man skal basere seg på og i eiendomskatt for eksempel ser man mer på eiendelene”

By using these guidelines organization is able to establish materiality limit for accounts and thus not verify everything below certain amount. Nevertheless, external auditors of AORG2 will include certain information, even though it would be below established materiality level

emphasized in the guideline, when they consider that particular accounting information has a higher potential to be exposed in fraudulent purposes:

”Så og igjen uvesentlig kan det være at vi ønsker å ta noe inn likevel hvis det ikke føles komfortabelt med den område som kanskje er utsatt for svindel, kontant for eksempel kan det være. Så det vil jeg si.”

Materiality threshold as a part of organizational corporate secrecy

As explained by the AUD1 materiality threshold as an exact amount, its process of establishment for particular situation and criteria, which are used to establish materiality level of ORG1 are considered as a corporate secrecy by AUD1. However, he provided the researcher with his personal policy of how materiality limit is assessed. The main focus was put on the users of accounting information and what they consider as important, while viewing financial statement:

”Jeg vet ikke hvis jeg har lyst å være veldig konkret, men jeg har lyst å være litt mer generell at hvordan fastsatt vi vesentlighetsgrense. Jeg har ikke lyst likevel å prate fritt. Men du kan si at generelt så legger vi til grunn at selskapet og det som vi har grunn til å anta er brukere av regnskapet. Så du kan si at vi må prøve å se på det aktuelle regnskapet. Hvem er brukere av regnskapet og hva tror vi at den aktuelle brukeren av regnskapet vil fatt en gjerne beslutning om. Den aktuelle feil - hva er det i regnskapet? At regnskapet der misviser informasjon for brukere av regnskapet.”

Benchmarking materiality threshold

The main method used for determining materiality of specific accounts at AORG1 is benchmarking of materiality. AUD1 explained that there are several different methods on how to benchmark materiality:

”Vi har for eksempel en prosentavdel av omsetning, det kan være en prosent avdel av resultat, prosentavdel av egenkapital. Så det er flere benchmarkstørrelse, som vi kan velge. Så der normalt tenker vi hva er en benchmark, som er aktuell for det aktuelle selskapet. Er det omsetning, er de eiere veldig opptatt med omsetning? Og hvis de eiere er opptatt med omsetning så bruker vi gjerne omsetning der, som benchmark. Hvis resultat er det, som styre er etter, så bruker man resultater, som benchmark.”

As it was stated above the main focus, while establishing materiality is on users of accounting information and the choice between benchmarking method would depend on, for instance solidity of the organization and type and amount of owners and the presence or absence of external users of financial statements. If organization is solely owned by one person the materiality threshold typically will be higher.

Continual vs. fixed materiality establishment

AUD1 explained that establishment and assessment of materiality of accounting information happens only in one period of the year and usually does not change over time, regardless of amounts of information needed to proceed:

"Jeg tror ikke at vi gjør det her. Du kan si at i en periode så er det veldig lite tid . Men vi skal ikke lavere kvalitet likevel. Etablering av vesentlighetsgrense skjer normalt på tidlig høst kanskje litt utover høsten. Så det skjer der litt i en periode, hvor vi har ikke så mye å gjøre og der fastsetter vi den. Jeg tror at vi ikke justerer den på grunnnet at vi er veldig travelt når vi kommer til mårs. Så det ligger fast der."

However, there are some adjustments that can be made at the end of the auditing process. To conduct an adjustment in a certain level of materiality it is important to justify the necessity of such adjustment:

"Så du kan si at man må ta stilling til den behov for å endre på vesentlighetsgrense. Det er ikke noe, som er vanlig for den typen der, men vi tar en stilling til den problemstillingen."

According to AUD2 approximate materiality threshold at AORG2 is usually determined before the audit of organization. However, establishment of materiality threshold is a continual process, which occurs throughout the whole audit. Nevertheless, before doing an evaluation, an auditor at AORG2 has to evaluate, whether or not the organization is capable of providing certain level of audit with certain limits of materiality:

"På måte det første som man må gjøre etter hvert man konkludert at vi kan ta på oppdragen som revisor vi ser at vi er kompetansert og at vi har kompetase. Man ser over gamle kartlegging."

Materiality assessment from the user's point of view

According to AUD1 materiality threshold is therefore a very subjective concept. The main approach of establishing materiality requires an auditor to imagine him or herself "sitting on the chair of a user of accounting information" and to try to find out what would be important for this particular type of user. At the same time external auditor must recognize the assumptions that he or she has made concerning the users of accounting information or discretionary items. Therefore, while using this method it remains impossible to determine materiality threshold for given user hundred percent accurately.

Materiality discussions with management

Official meetings

While establishing materiality threshold AUD1 at AORG1 emphasized that for inexperienced independent auditors it can be very difficult to establish correct materiality level for financial statements. However, even the experienced independent auditor is obliged to discuss materiality with his or her clients during a “tidmøte”- a meeting with clients and partners:

“Og du kan si at i våres metodikken handler det at det er ganske vanlig kanskje at man må gjøre en tidmøte. Det betyr at vi møtes med noen, som er ansvarlig for oppdragen, den partner, som eier oppdragen og bestemmes det nivå der. Man diskuterer og blir enig om hva det slags av nivå er. Så vil vi beslutter den størrelsen der.”

Joint interests and trust

According to AUD1 discussions with clients occur very rarely throughout the audit process. These discussions happen on a pre-planned basis and usually there is not so much pressure between the participating parties, when it comes to discussing materiality of certain misstatements and it is very unusual if such kind of discussions occur. However, situation can be different if audit organization is listed on a stock exchange and the auditor will have to take into consideration the needs of market investor. In cases, where auditors and management are unable to achieve consensus in particular situation this will be reflected in the audit report:

“Vi kan være faglig uenig om forskjellig ting, men det aldri blir store diskusjonen. Du kan si at hvis vi er uenig om noe og vi står i hvertfall i standpunkten du kan si at det skal dokumenteres at det har vært en diskusjon at man blir uenig. Men jeg føler at det er en ting som skjer skjelden. Jeg har ikke gode eksempler på det.”

Due to the fact that both parties are interested in reporting correctly any possible disagreements will be discussed beforehand during the early stages of the audit and will be solved in time:

“Ja, jeg føler at med de problemstillinger, som i min forhold med kunder er det en type problemstillinger, som det er ganske enkelt å oppnå konsensus der i tid. Du kan si at du har en motivasjon for å bli partnere mellom deg og medarbeider, men jeg tenker at det oppløses. Det kan være at medarbeider kan komme med problemstillingen. Men hvis jeg er uenig med den problem så blir det ingen spesielt diskusjon etablert. Så skal de akseptere at de har feil.”

Use of national and international resources

Despite the fact that there are no large discussions between the external auditor and the management the overall threshold for clarifying uncertainties is quite low and in this case this will be solved through the regular conversations. However, while assessing certain difficult situations and cases, when external auditor is unable judge on whether or not particular

materiality threshold is applied correctly he or she is able to use resources of organization both on national and international levels:

“Man setter på et ganske godt og stort fagmiljø her lokalt, men ser vi også på et veldig stort system, som vi har resurser både nasjonalt og internasjonalt, hvis vi spør om vanskelig problemstillinger. Du kan si at det er ikke alle problemstillinger, som det finnes kanskje svar på. Det kan være nye problemstillinger, helt spesielt problemstillinger, som det ikke finnes noe eksakt teori og løsning på og der har vi også et system for ivareta den, som ekspert alene og partnere med erfaring. Så har vi en måte for å finne løsning på sånne type problemstillinger.”

And even though AUD1 will try to utilize all resources that he is provided with at AORG1 there can be certain misstatements that will not be reported:

”Det må være veldig spesielt omstendigheter at det skal ikke berettes. Så det må være enten veldig små ting eller kanskje ting, som er veldig ferdig. Det vil være uhensiktsmessig å ta opp prosessen å rette opp ting at man kan like godt korrigere det på nyttår.”

Expectations gap

The most common obstacle that occurs between the management and the external auditor, according to AUD2 from AORG2 is the expectation gap, when the management expects total verification of all accounting information and achievement of full control. As it was emphasized by the manager of AORG2 the audit process is based on the random sampling technique and it is impossible to achieve a hundred percent control over all accounting information. Moreover, the whole concept of audit implies that it is possible to verify an organization only to a certain level of materiality. However, AUD2 emphasized that this is an obstacle, which is possible to overcome:

“Så det er forventningsgapet mellom fullkontroll og revisjons konsept som egentlig kan være utfordring. Men når vi har identifisert feilinformasjon og skal diskutere med kunden så oppleve gjennom utfordringer så det er kunder som er interessert å rapportere rette tall.”

Discussing discretionary and non-discretionary accounting items

The AUD2 at the AORG2 explained that non-discretionary items are being corrected by the independent auditor. However, the correction of discretionary items would involve the reevaluation of these items and discussing these issues with the clients of the audit firm:

”Mens andre skjønsmessige poster kan det være at feil som er funnet kan gå tilbake i tid og der man må vurdere avhengig av hvilken type feil det er eller hvordan den skal rettes .Så da handler det om å komme frem til gode løsninger med kunden, men samtidig er regnskapet rett. Konseptet er sånt at det er vi, som vurderer vesentlige feil som må rettes i regnskapet. Hvis ikke det rettes, så vil det ha konsekvensen i revisjonsberetninger.”

Documentation process of materiality threshold

As explained by AUD1 established materiality threshold will be documented in the audit report. However, the external auditor will have to justify, why certain information was not verified. This is usually based on the risk assessment and the size of possible unverified misstatement. This documented information is considered as a corporate secrecy:

“Det er egentlig noe, som vi holder skjult for selskapet, vesentlighetsgrense, som vi forbereder. Det er sikkert så ville være skjønn som kommer an på revisor, som har denne vesentlighetsgrensen. Så du kan si at der tenker man at selskapet skal levere et mest mulig korrekt regnskap der.”

As emphasized by AUD2 discussions on materiality begin, if the audit firm has found certain misstatements during the verifications, which will be summed up in the document called “summary of misstatements”. This document provides an overview of all found misstatements, which are segregated into factual misstatements, suspect misstatements, or discretionary misstatements. This document is used during the discussion process with the management of the verified organization:

“Vi også deltar i plannlagte styremøte og ledere og der skal vi også ha kontakten med ledelsen underveis om ledelsen skal samarbeide med oss lagte rett for at vi kunne gjøre jobben som vi skal gjør. Så det er på måte settingen er gjort at vi tar opp feil som er i regnskapet så retter vi det. Vi vurderer også de feilene, som er der og de, som er vesentlig for regnskapet. Enkelte ting er kanskje mer omstendelig å få rett hos kundenene.”

If the material misstatements are corrected external auditor at AORG2 discloses an audit report to the disclosed financial statements. Employees at AORG2 are also capable of providing an attestation in accordance with “selvangivelse” or tax returns paper from Skattetaten- Norwegian tax organization. The external auditors at AORG2 also provide a “næringsoppgaven” – a document, which provides an overview over the main positions in the balance as well as “lønnrappporteringer”- a salary record. If the organization refuses or is unable to correct required material misstatements they will not be attested by the external auditor and will be forced to deliver these papers unsigned to the Skattetaten.

5.2.2. Quantitative factors that affect materiality

Size of the entity and average earnings in the industry

AUD1 also noted that materiality threshold is to a large extent dependent on the size of the entity. However, the relationship is not strictly linear and there are other factors that can influence the process of materiality establishment and assessment:

“Så det er klart at størrelsen har betydning. Det er helt åpent der. Jeg er ikke sikkert at det er helt linær på et selskap, som har ti millioner i omsetning og der er det et selskap, som har et hundre millioner

har større vesentlighetsgrense. Det er ikke sikkert. Det er andre ting også. Så det er ikke noe eksakt sammenheng, det er så mange ting, som er lagt til grunn der.”

Another concern provided by the AUD2 is that the employees in this organization should compare the earnings of the verified organization with the average earnings in the industry in order to see any discrepancies and thus detect any misstatement and omission that can be material.

5.2.3. Qualitative factors that affect materiality

External auditor’s personal characteristics

AUD1 at AORG1 explained that usually external auditors do not rely on any expert opinion due to the fact that legally they obtain sovereignty on establishing materiality threshold. The senior manager of AORG1 has not experienced a need to use a consultation of an expert. The process of materiality establishment is personal-dependent and will vary even between experienced auditors:

”Jeg er helt sikker at man får ganske ulike tall der ifra ulike persjoner, som skal gjøre det. Så prosessen av vesetnlighetsetablering er persjonavhengig.”

On the contrary according to the manager of the AORG2 materiality threshold is not influenced by the personal preferences and is not subjective. AUD2 emphasized that even though the average auditor at AORG2 needs to rely on experience of the audit firm he or she will not make any considerations, based on personal opinion:

”Vi skal bruke den erfaringen vi har for å fastsette der og det er ingen av oss som går mye å tenke på hva som ville hatt fordeler personlig. Så jeg kan ikke si at personlig karakteristikk vil ha betydning for vesentlighetsgrense.”

It was further explained that employees in this organization try to do as much as possible in order to make an objective evaluation of materiality. This was supported by the fact that quality of materiality evaluations is verified both internally and by Financial Supervisory Authority of Norway:

”Ja, vi prøver å gjøre det objektivt. Det er klart at vi skal dokumentere alt vi gjør og vi blir etterprøvt så vi har kvalitetskontoll både internt og fra finanstilsynet, som kommer for å overprøve hva vi har gjort og ser om det er rett. Det jobber vi utfra hele tida, så vi ligger ikke personlig preferanser til grunn.”

Knowledge about enterprise, its activities and employees

AUD1 emphasized that internal situation in the organization would influence materiality threshold:

”Hvis vi tar et selskap, som har vanskeligheter så kan det være behovet oss å senke vesentlighetsgrense. Det kan komme an på bonusordninger eller intensivordninger der i selskapet. Så gjør det den, som sier på sånne typer ordninger og han kan ha egen interesse og styret er i en retning.”

Similar reasoning was used by the AUD2, who stated that independent auditors in ORG2 always use their professional experience and it would be impossible to establish materiality guidelines that would include all the customers in a certain branch or segment. Therefore, to conduct an evaluation of materiality an auditor has to pay particular attention to internal and external circumstances of the organization:

”Vi reviderer på hvem som er brukere av regnskapet, hvilken situasjon selskapet er - er det en oppkjøpskandidat eller er det ordningen i ledelsen og erfaringen til regnskapsfører har også betydning. Hvis det var gjort på en regnskapsfører så må vi ta høyde for at man kan gjøre feil så vi må senke vesentlighetsgrense.”

Risk assessment

Another factor that is taken into consideration by AUD1 is risk analysis. However, as emphasized by the interviewee the analysis is to a large extent qualitative and depends on the type of organization and its activities:

”Jeg vil si at risikoanalyse er det en kvalitativ vurdering, som vi gjør. Men der tar man inn litt mer selskapsesifikke forhold og vurderer hva er en risiko fra ting kan bli feil. Og det kommer litt an på type selskap, hva er de selskapsaktivitetene, hva er det det, som kriterium der av regnskap og regnskapsinformasjon og sånne type ting. Men også der er det mye kvalitativt vurdering, som er lagt til grunn der.”

AUD2 from AUORG2 also conducts risk assessment on whether or not accounting information contains certain material misstatements. While doing such an assessment the main focus for AUD2 is the business risk and risk of internal control operations or what kind of operations and routines does the organization have, which focus on the risk reduction. These matters are being evaluated with internal control risk analysis and will affect the level of materiality. In other words employees in the organization establish a specific materiality threshold for an area, where there is more risk:

”Vi analyserer også iboende risiko og hva gjør de for å eliminere risiko. Egentlig de eliminerer risiko ikke, de bare reduserer det. Også tar vi i betraktning revisjonsrisiko for at den skal bli levelig for oss. Så planlegger vi hvor mye arbeid vi må gjøre for å få den til et akseptabelt nivå. Du kan finne denne risiko modellen i litteraturen.”

It was stated by AUD2 business and audit risks are to a large extent dependent on the knowledge of the audit firm about the enterprise. And if the organization obtains an in-depth knowledge originally employees can usually create a more detailed audit program and the risk of

material misstatement will be lower. On the contrary, when the audit firm is unfamiliar with its client the risk can be adjusted on the go:

“Det betyr også at vi gjør et utvalg ut fra hvordan vi har definert, hvor mye om det er signifikant risiko eller om det er vanlig risiko. Underveis så kan vi se at det er signifikant risiko der man må plannlage mer arbeide. Det må vi gjøre. Vi kan ikke avgi revisjonsberetninger før vi er i mål, det nytter ikke å skulde på dårlig tid.”

Incentives to misinterpret information

While assessing materiality one of the most important factors that was emphasized by AUD1 was that independent auditor will try to uncover whether or not management and board of directors will have incentives to misinterpret the true and fair view of accounting information in order to gain advantage of specific situation, for instance if organization has a large loan in the bank and therefore is biased to present information in a certain way. Nevertheless, even if external auditor will take into consideration all these factors it is impossible to provide a full coverage of all possible impacts thus allowing certain discretion in materiality judgments:

“Du kan si at vesentlighetsgrense er hele ikke noe eksakt størrelse egenlig. Vi må bare prøve å tenke på en tallstørrelse i et nivå og det blir veldig skjønnsmessig der. ”

Type of ownership in audited organization.

According to AUD2 materiality threshold will vary depending on solidity of the verified organization that is how many and what kind of owners does the organization have. AUD2 stated that materiality of accounting information would be influenced if organization would be owned by its employees and management or by external shareholders. Therefore the more solid is the audited organization, the lower the materiality threshold for it will be:

“Også har de et hundre prosent egen kapital- har de definitiv mindre risikoen i selskapet enn når de har fem prosent og resten gjeld. Det er der noe flere brukegruppe. Du kan si at vi prioriterer andre brukegrupper også kanskje mer enn egenkapital, finanseringer, fordi det er eiere som tar risikoen og de har nok bedre innsyn enn eksterne.”

Acquisition candidate

AUD1 explained that external factors to a large extent influence materiality threshold. The most common situation would be if organization is about to be acquired and the management will have incentives to present information in financial statement in a specific way:

“Også kan være andre eksterne faktorer, som også kan ha mer påvirkning her. Det kan være at de vet, at skjedde en salg av selskapet. Hvis det er en oppkjøpskandidat. Og der må man typisk senke terskel for å akseptere av mye feiler. Du kan si at på et regnskap man må vite eksakt hva talle skal være. Så våres verdikt er vanskelig.”

Economic environment

As it was as well stated by AUD1 external circumstances can affect the assets of organization and lead to their impairment. In that case the auditor will lower materiality threshold to make a precise verification of this issue:

“Og det er klart at normalt har man økonomisk nedgangstida at man ser at det er litt skyer på himmelen. Man er usikkert på hvilken veien skal det med oljepriser som eksempel, ikke sånt. Så det er klart at det har betydning i forhold til det vi må gjøre, spesielt på eiendelsida i balansen må vi vurdere der om det er nedskrivingsplikter på driftsmidler. Det kan være immaterielle driftsmidler, men også på materielle driftsmidler.”

AUD1 emphasized stated that if there are several circumstances and they will require different materiality threshold he would focus on selecting the lower limit of materiality. As AUD1 stated it is very uncommon for him to operate with different materiality limits for one organization.

Tax authorities

Another emphasized external factor that would affect materiality is tax authorities. As stated by the manager of the AORG2 the first environmental factor, which is being assessed, is how certain materiality threshold would affects VAT:

“Det sett vi på problemer på de område, som går vi direkte på og som påvirker skatt og moms arbeidsgiveravgiften så vesentlighetsgrense er sannsynlig lavere.”

If the tax authorities require different limit of materiality external auditors of AORG2 would try to use to the lowest possible materiality threshold:

“Det kan være at det er to situasjoner, som selskapet er rammet av og det er en at vi må senke det og den andre er at vi ser mer overfladisk på det. Så må vi gå på den som er lavest, som krever lavest vesentlighetsgrense.”

AUD2 continued that the audit firm would focus on demands of the tax and fee authorities, due to their mandatory requirements. Therefore, in order to achieve a high precision level the employees of this audit firm will intentionally lower the materiality threshold:

“Men når de gjelder innberetning og opplysning av offentlig myndigheter så skal det være høyt presisjonsnivå.”

Moreover it was emphasized that during the last several years there has been a trend in the audit industry that the role of the state in the economy has increased- therefore every auditor has to focus on meeting official rules and procedures:

”Du kan si at det er veldig lett sånn som trenden har vært de siste årene og levert veldig som compliancejaget at man skattelever, regler, lover og på måte hvert staten sin forlenget arm i næringslivet. Og det er på måte kanskje det som ligger lengst inn i ryggmargen også på revisor at det er som er regelbaserte kjennetegn skal være i orden.”

External and internal users

As explained by AUD1, while making assessment of materiality limit the main focus of external auditor will be on all possible users of accounting information. The external auditor at AORG1 considers the users of financial reports, which are affected by materiality as professional individuals and includes information on assumptions about them in the auditor’s report. However, the external auditor stated that he cannot be absolutely sure, whether or not the users will be fully informed about the extent of the external auditors work. Therefore it is the auditor’s responsibility to try to perceive the information from financial reports from the user’s perspective and try to adjust the materiality limit accordingly. However, the external auditor is responsible for a certain trade-off between having a low materiality threshold and satisfying all users and time- and cost constraints:

”Det terskel, som vi setter for vesentlighetsgrense det blir aldri diskutert mellom brukere. Det blir det ikke. Jeg vil tror at brukere av regnskapet vil ofte ha vesentlighetsgrense som lavt, som mulig. Men det er ikke sikkert at eieren og selskapet vil betale, fordi det vil koste mye mer med lave vesentlighetsgrense. Men det er helt ikke sikkert at det er praktisk gjennomførbart på grunnnet av det ligger estimat og det ligger forutsetninger om regnskapet, som er ikke eksakt kanskje. Du er helt avhengig her av spillerom der.”

Senior manager at AORG1 does not highlight any particular group of users of accounting information and does not consider a certain specific group in the first place. Instead he tries to establish materiality threshold that would fit all users of accounting information:

”Jeg tenker at i den grad man skal ivareta alle brukere av regnskapet de, som er faktisk er velgt brukere av regnskapet. Så på hele måte så må man prøve å ivareta alle på en best mulig måte.”

Users that require lower materiality

According to AUD1 he will mostly focus on groups that will require lower limit of materiality:

”Den våres eksempel det er en oppkjøps tilfeldig. Man vil ha større behov for å ha mer presis regnskap enn hvis du har et ”going-concern” og du har god økonomi og du har godt forhold til banken. De har hatt gitt deg penger og du har solid egenkapital.”

According to AUD2, while establishing materiality the main focus will be put on the users of accounting information that are viewed as affected by materiality threshold. AUD2 emphasized that usually auditors that work at AORG2 try to make an assessment of what users are affected by particular level of materiality.

The manager of AORG2 emphasized the following groups of users that are viewed as affected by materiality threshold:

”Og når jeg snakker om kunder også snakker jeg om ledelsen, fordi alle brukergruppene ligger vi i det her enten det er skattetaten, eller kjøper og det kan være kunder og ansatte også, som er en kategori.”

General considerations on discretionary items

Nature of discretionary item

According to AUD1 materiality threshold is established to a large extent based on the size, type and amount of discretionary items. AUD1 stated that it is impossible to find a perfectly correct materiality for discretionary items

Assumptions concerning discretionary items

As stated by AUD1 to make an approximate assessment of discretionary items, usually there are different types of calculations that are conducted in order to justify or falsify their value. It is important to note that these calculations are to a large extent dependent on assumptions about the nature of discretionary accounting item:

”Der ligger skjønsmessig forutsetninger, som er lagt til grunn der til å gjøre beregninger. Sånt at en del er avhengig på forutsetninger, også verdien er skjønn. Men det er en del, som vi må bare forholdes.”

As explained by AUD2 during the process of verification the auditor can detect a misstatement and then he or she has to make a final reevaluation after the process of audit and will try to a maximum extent correct detected misstatement in discretionary item. However, due to different assumptions about discretionary items assessment, which are used by preparers of accounting information and by external auditors it can be difficult to do that. All information, where external auditor is uncertain will be included in the audit report:

”Så det må vi se at grunnlagings formulering er gjort rett og hvis man usikkert så tar man det opp i revisjonsberetning”

Impact on true and fair representation of accounting information

AUD2 at the AORG2 explained that, while analyzing discretionary items employees of this audit firm would assess the impact of these accounting items on the true and fair representation of information disclosed in financial statement. If impact would be considered as significant, the materiality threshold for this particular item will be lower thus allowing a more precise and thorough verification. This idea is confirmed by AUD1, who explained that it is important to assess the impact of possible misstatements in discretionary accounting items on the financial statements.

Client's opinion on materiality of discretionary items

To establish materiality of financial statements independent auditors from AORG2 use information obtained from their clients during the special meeting or "årsmøte". During this meeting external auditor engages him- or herself into conversation in order to gain an understanding about the assumptions used, while making decisions about the nature of certain discretionary items.

Knowledge about organizational history

AUD2 emphasized other factors that influence auditor's decision on how to establish materiality threshold for discretionary accounting items:

"Så det er årsmøte med kunden, historisk og finansiell informasjon, erfaring, med selskapet eller med bransjen, livsyklus til selskapet og andre kjennetegn som vi søker etter. "

Since the main source of information is the customer it is important to have knowledge about the client's past history as well as about application of particular particular discretionary item in the industry, where the verified organization operates.

IAS 38:57 Development phase

Future value of the product

Concerning development phase account AUD1 explained that he does an evaluation, applying a similar approach used for other depreciation accounts. However, making even an approximately correct estimation is more challenging due to increasing number of assumptions, which need to be considered and verified by the external auditor.

As it was stated by the senior manager of AORG1 according to Norwegian laws and regulations organization is obliged to activate researched product and put into development

phase during the process of its development. However, to do that employees of the organization have to recognize the value of the future product and estimate, whether or not it will be profitable in the future. As stated by AUD1 this is very difficult due to the fact that one has to be aware of many different circumstances and factors:

”Det er klart at det er den første målen å være klart å lage produkt, men å være klart å lage produkt, som markeder er interessert å betale penger for. Har du konkurrenter, som kanskje også utvikler en produkt, som kanskje kan konkurrere og kanskje er det en bedre produkt enn du har. Det er mange andre omstendigheter.”

Therefore, the auditor has to consider these circumstances and make assumptions to be able to arrive at a reasonable estimate. AUD1 emphasized that tangible assets are less complicated to estimate, due to higher comparability. However, when the project is an intangible asset it can be very difficult to conduct a correct estimation, due to unknown reaction of the market.

Organizational capabilities to develop product

According to the AUD1 estimation of whether or not the project has been moved correctly to development phased is based on the auditor’s opinion on whether or not organization is capable on completing and implementing such a project. This includes verification of whether or not the value, included in the financial statement is not too large or too small, when the organization is going to complete the project and what type of depreciation method and what depreciation time will be used. AUD1 emphasized that these are not the only type of issues, which he faces, while verifying this type of depreciation accounts. However, it AUD1 stated that the verified organization carries responsibility to justify selected approach of project activation:

”Det er masse problemstillinger der. Det er klart at det er subjektive problemstillinger, men i utgangspunkter er det selskapet, som skal ta stilling for det. Så skal selskapet ta en stilling for det- vi overprøver selskapet så godt, som vi kan og utfolder dem mot regler i regnskapslovene for å se om de har procedyre, som var gjort i forhold til regnskapsreglene.”

Depreciation of intangible assets

Professional experience

During the conversation, senior manager of AORG1 explained that a typical example of discretionary item can be depreciation of fixed assets. In this case it is really important for the auditor to have experience concerning the nature of particular asset to estimate appropriate depreciation time. However, it is very important to provide a reasonable justification of the estimate and not have a too short depreciation time, because of severe consequences from legal

authorities. An example that the researcher was provided with was the depreciation of the office-building, which belongs to organization. According to AUD1 its depreciation time can vary between fifty and two hundred years and is largely dependent on different considerations, which are done by the auditor:

”Det kan være både beliggenhet og byggesbeskaffenhed, kvalitet, hvor mye verdi har legget de i bygge, i den ting påvirker levetida.”

Essentially similar method is used, while determining the depreciation time of intangible assets or products that are developed by different software-development organizations. However, this can be more challenging, especially when the developed product is innovative and external auditor cannot benchmark it against other products.

5.3. Summary of empirical findings.

This section presented empirical information that was gathered by the researcher during the data collection process. Gathered information represents perspectives of seven professionals, namely MAN1, AUD1, MAN2, AUD2, CEO2, ACC2 and BODM2. While conducting the in-depth interviews researcher received a deep insight into the insider's and the independent auditor's perspectives on the process of materiality establishment as well as various perspectives on quantitative rules of thumbs that are applied in practice by these professionals. The researcher has learned more about qualitative factors that influence materiality threshold. The interviewee's provided researcher with a deep insight into qualitative considerations, which are taken into account, while evaluating materiality of certain discretionary accounting items. Findings, presented in the empirical part of the research will be used later in the discussion chapter in order to compare characteristics of materiality emphasized by the insiders with those emphasized by the external auditors.

6. Discussion

6.1. Role of materiality characteristics in enhancing accountability

The following section of the discussion chapter assesses the role of emphasized materiality characteristics in various aspects of accountability. It is based on the theoretical propositions and concepts, which were outlined in the theoretical framework of this research as

well as on the empirical information that was gathered by the researcher. After assessing the role of materiality characteristics in each aspect the researcher will compare the results obtained from the first stage of analysis that is the perspectives of the insiders and the external auditors in order to make a summarizing conclusion.

6.1.1. Insider's perspective

Public accountability of the insiders

As stated in the empirical chapter, while assessing materiality the insiders often tend to rely on results of “avstemming” or matching technique or matching accounting information with various sources in order to detect material misstatement. In many cases this was done in order to ensure congruence of the materiality limit with public “oversight agencies” Smulovitz and Peruzzotti (2000:153), such as Norwegian governmental tax and fee organizations, thus making the software-development organization more accountable to the public by following tax rules and regulations. Some of the insiders also emphasized dependence of materiality on other governmental regulations and that it has to be adjusted in accordance with the laws of the country, where the organization is located. Moreover, some insiders explained that they are to some extent dependent on the auditor's authority to approve the accounting information to established level of materiality. Therefore the insiders take into consideration the power of the private “oversight agency”, which is assigned by the government through laws and regulations. For this reason the insiders discuss materiality of certain accounting items with the external auditors. For instance, during the conversation with the external auditors the insiders verify that they turn their project from research into development phase correctly. By aligning materiality threshold with the requirements of aforementioned agencies these individuals increase the relevance and the reliability characteristics of accounting information and thus positively impact the extent to which they are accountable to society through the “horizontal” perspective. Smulovitz and Peruzzotti (2000:148)

While evaluating, whether or not there are any material misstatements in the financial reports some insiders also tend to rely on capacities of their professional accountant, which as noted in previous chapters is also responsible for verifying that materiality threshold applied in the organization is in congruence with norms that are set by the “oversight agencies” in Norway.

Another important factor that makes the insiders and the software-development organization, where they work more accountable to the public are trust-based relationships between the insiders and the external auditors, while discussing uncertainties related to

materiality. This increases the quality of work done by the external auditor by easing his or her access to organizational information.

As emphasized by some of the insiders due to dependence of organizational income on customers, the insiders also consider the needs of their clients, partly because they are dependent on them. In so doing the insiders positively impact the extent to which they are socially accountable to the stakeholders and users of their product. Sinclair (1995:224)

Managerial accountability of the insiders

Some of the insiders stated that they rely on the competences of professional accountant and financial director, while assessing materiality of accounting information in general as well as materiality characteristics of discretionary accounting items. And it seems that even though the information asymmetry exists the insiders emphasized that their actions are to a large extent based on trust and therefore this positively impacts managerial accountability.

While considering the users of accounting information the main emphasis was put on considering the needs of board of directors as well as taking into consideration perspectives of department leaders. The insiders differentiate amounts and type of information that is used by these professionals. The insiders aim at providing these users of accounting information with a reasonable representation of current situation thus reducing the information asymmetry and increasing the extent to which they are accountable to the board of directors member and department leaders.

Professional accountability of the insiders

Materiality standards

While establishing materiality threshold for the financial statements different insiders have focused on establishing materiality threshold for different groups of accounting items such as different materiality threshold for the balance or for the income and for the costs. As stated by IAASB (2009a: 317) this information has to be disclosed in the documentation and thus while applying these techniques during the process of materiality establishment these insiders make themselves more accountable to their professional standards. This enhances their professional accountability.

While considering the quantitative factors that determine materiality the main emphasis was put on income as well as on transactions with customer's, size of the accounting item, type of accrual items and on key financial ratios. Similar quantitative techniques are emphasized by International Standard on Auditing 320: Materiality in Planning and Performing Audit (IAASB,

2009a) as well as by International Standard on Auditing 450: Evaluation of Misstatements during the Audit (IAASB, 2009b). By following closely the rules and regulations emphasized in these standards the insiders increase the extent of professional accountability by acting in congruence with the professional “code of conduct”.

Insiders have also stressed the importance of risk assessment procedure, while considering whether or not certain misstatement is material. Insiders were constantly involved in the process of assessing the “nature, timing and extent of risk assessment procedures” (IAASB, 2009a:315) Therefore, the actions of the insiders were to a large extent in congruence with the information from the materiality standard, thus positively impacting people, products and service aspects of professional accountability.

The process of materiality assessment

The insiders also used the “avstemming” or matching technique in order to determine accounting materiality. However they matched accounting information not with external sources, such as Norwegian tax organizations, but instead with accounting information, which is used for internal reporting such as budget. This proves that during the process of materiality establishment these insiders increase their professional accountability by focusing on the quality of their services, which are included in professional responsibilities as well as by applying their extensive professional experience, while assessing characteristics of materiality. At the same time the insiders ensure the quality of their services.

Some of the insiders are also engaged in matching accounting information with information from other software-development organizations. In so doing they ensure that the quality of accounting information is sustained at a high level.

Discretionary accounting items

While making assessment of discretionary accounting items the insiders explained that in general they have to carry more responsibility, while assessing items that are opened for discretion due to high risk of making an incorrect evaluation, because the wrong assessment of a discretionary account might result in consequences that will be damaging for their organizations. With this the insiders ensure the quality of accounting information that is presented to the users of financial reports.

While assessing what part of project to put into development phase the insiders tend to rely on internal rules and regulations that they have established based on their personal considerations and experience. According to IASB (2010) in order to move a project from the research phase into development phase it is necessary to estimate the project’s ability to generate cash flow in the future periods. Due to complexity of such evaluations it is difficult to arrive at a

precise estimate, even though the insiders do an in-depth analysis of the viability of each project. However, by relying on internal “rules of thumb” as well as on the “safety principle” the insiders ensure that they do everything that they can in order to align their practical skills with information from the standards thus increasing both the reliability and relevance of accounting information, which they prepare as well as improving their professional skills. Sinclair (1995:229).

The insiders also keep themselves in a close contact with the project development team in order to gain deeper insight into the project features. By having a better understanding about organizational activities the insiders lower the possibility of making an incorrect estimation and thus increase both the quality of their professional services and products that they deliver. Caulfield (2011:17)

The insiders also assess whether or not the extent of losses of accounts receivable is material. The most important factor that was emphasized by some insiders is the impact on annual financial statements and the necessity to make corrections in the annual report. In so doing the insiders increase the reliability and relevance of accounting information and increase the quality of accounting information. The insiders also do a continuous verification of accounts receivable in order to find material misstatements. This positively impacts accounting information as well as increases the skills and professional capabilities of the insiders.

While choosing an appropriate time of intangible asset depreciation besides considering laws and regulations some of the insiders base their assessments on being reasonable and thus rely on their professional experience and certain organization-specific principles for every type of intangible asset. Therefore, by applying these factors in a correct way the insiders increase their professional competences and show that they maintain necessary knowledge and skills that are required for this profession. Caulfield (2011:17) However, as stated by some of the insiders sometimes even a person with an extensive professional experience is not able to predict the depreciation of intangible asset totally accurate, because they he or she to make forecasts about future events.

Besides the choice of the time of depreciation the insiders also have to determine the model of depreciation used both for accounting regulations (regnskapsmessig) and tax-regulations (skattemessig). The choice of the model for every type of regulations is dependent on large amount of different factors such as the amount of work, which is necessary to conduct and sustain the project. The insiders will also consider the size of the project and will compare it with other software that is currently used by the market. These assessments lower the risk of making material misstatements. By conducting these evaluations the insiders increase their professional skills as well as extend their experience and this makes them more professionally accountable

from the “people” perspective. Caulfield (2011:17). At the same time various criteria increase representational faithfulness of accounting information as well as its reliability, thus increasing the quality of the final product used, which also has a positive impact on professional accountability. Sinclair (1995:229) The high level of performance, which is required in order to be able to conduct such an evaluation, also decreases the risk of providing a low-quality service thus improving professional accountability of the insiders. Donaldson (2006:66)

Other

Every insider that is included in the study has emphasized that relationships between him or her and the external auditor are based on trust and both parties are interested in being engaged in an appropriate “code of conduct” Caulfield (2011:17), which has a positive impact on their professional accountability.

Another factor, which was emphasized by the insiders, is that in order to have an ability to quickly recognize any misstatement as material or not it is important to maintain an in-depth knowledge about enterprise and its activities. Maintaining this knowledge is a professional responsibility of each insider. This has a positive impact on the “people” perspective of professional accountability. Caulfield (2011:17)

Personal accountability of the insiders

The insiders stressed that, while establishing materiality they do a continuous analysis of what is material and what is not. In so doing these insiders are engaged into control over materiality threshold relying on their personal considerations. This involves a subjective analysis of what is material and what is not in given circumstances. Due to achievement of high results by both organizations the researcher concludes that these professionals have a high level of personal accountability. Being more specific these individuals maintain control over their processes of decision-making both through their ability to adjust their procedures in accordance with accountability norms as well as to take into consideration the possible outcomes of their actions.

It is also common that some of the insiders to increase the materiality threshold due to a large amount of clients. Therefore, sometimes some of the insiders are forced to balance between the needs of different customers in order to satisfy everyone.

As mentioned earlier while discussing materiality with the external auditor the insiders tend to focus on establishing trust between themselves and the external auditor. One of the reasons behind that is that they can have personal incentives in clarifying all uncertainties and thus ensuring that the work, which being done is done correctly.

As explained by the insiders their personal characteristics will very likely influence materiality threshold. For this reason in some cases the materiality limit is based solely on the “gut-feeling”. Due to the fact that these individuals have heavy working responsibilities it will be necessary for them to be accountable to the procedures that they are involved in. These individuals also have to consider whether or not there are any significant consequences of not considering certain misstatements as material. Therefore, while relying on the gut feeling these individuals enhance the extent of their procedural personal accountability, as well as take into personal consideration the impact of making a material misstatement. Their personal experience and personal attitude can also be considered as a source of personal accountability. Sinclair (1995:230).

6.1.2. External auditor’s perspective

Public accountability of the external auditors

While discussing materiality of accounting information the external auditors act as an “oversight agency” Smulovitz and Peruzzotti (2000:153) and ensure that level of materiality is aligned both with the customer’s needs as well as with the requirements of the governmental organizations. Therefore the external auditors discuss materiality of accounting information with representatives of the verified organizations at special meetings. This is done in order to establish materiality level that would be appropriate for their clients and at the same time would fit the tax and accounting rules of the governmental organizations that were assigned by the public. In so doing the external auditors increase the extent of their public accountability. Sinclair (1995:224).

Another factor, which improves public accountability, is that the external auditors focus on establishing trust-based relationships with their clients. Even though sometimes the external auditors can face challenges due to differences between expectations of the clients about the scope and the extent of audit procedures both participating parties are interested in ensuring that they will be able to solve all misstatements in time. This increases the quality of their work as an “oversight agency” Smulovitz and Peruzzotti (2000:153), which is assigned by the public and thus makes them more accountable in the social perspective.

Despite trust-based relationships with their clients the external auditors verify whether or not their customers have incentives to misinterpret materiality of accounting information and to bias it so that they could distort the “predictive value” (FASB, 2008b:13) of financial reports. The external auditors also pay attention to the amount of shareholders in the audited organizations and try to uncover the needs of the organizational owners in order to understand whether or not they have incentives in misrepresenting materiality threshold in order to sell the

organization to others with a higher price. The external auditors also consider economic environment and how it impacts the management's incentives to adjust accounting information in order to distort the true and fair view of accounting information. Another factor, which is being verified, is whether or not the management of audited organization has incentives to influence tax and fees of organization or has occasionally done any material misstatements. By taking into consideration all these factors the external auditors ensure that they act in congruence with their role of the "oversight body" Smulovitz and Peruzzotti (2000:153), by verifying that audited organization's actions are in accordance with the needs of the society. With that the external auditors enhance their public or social accountability. Sinclair (1995:225).

The external auditors also stated that, while assessing the impact of materiality on the users of accounting information they will try to take into consideration the needs of all users of financial statements and internal reports in order to have such a materiality threshold that would not distort the true and fair representation of accounting information for everyone, who utilizes accounts of audited organization. In order to achieve that the external auditors will focus on users that require the lowest materiality threshold possible and will try to preserve neutrality in order to act as an "oversight agency" Smulovitz and Peruzzotti (2000:153) thus making the external auditors more accountable from social perspective.

Managerial accountability of the external auditors

As noted earlier the external auditors rely on certain organization-specific documents during the process of materiality assessment. This increases the "verifiability" (FASB, 2008b:13) of accounting information analyzed by the external auditors. By aligning the actual process of materiality evaluations with the materiality guidelines and benchmarks the external auditors increase their managerial accountability or accountability to their administration. Sinclair (1995:227)

During discussions with their clients some of the external auditors also rely on the databases from their audit-firms. This can refer both to national and international databases that are utilized by these professionals, when establishing materiality threshold becomes more complex and uncertain process. By using organizational experience and by aligning their actions with the information from their databases the external auditors increase the extent to which they are accountable to the owners and administration of their audit firm.

Professional accountability of the external auditors

Materiality standards

In order to determine materiality of accounting information the external auditors conduct various types of benchmarks. The choice of an appropriate benchmark depends on the type and size of organization which is being verified as well on the perception of users needs. As stated by the IAASB's International Standard on Auditing 320: Materiality in Planning and Performing Audit in order to establish materiality of accounting information correctly it is necessary to "exercise professional judgment" (IAASB, 2009a:318) and there are different quantitative and qualitative factors that affect the judgment of the external auditor. These factors include the "nature of the entity" (IAASB, 2009a:318) as well as certain items on which users of accounting information are supposed to be focused. This proves that by applying these types of benchmarks the external auditors do their work in congruence with the professional standards. In so doing they improve the quality of the services that they deliver and reduce the risk of making a material misstatement. Donaldson (2006:66) By aligning their benchmarking techniques with the information from the standards they ensure that accounting information, which is established to a certain level materiality provides a neutral and faithful representation of organizational activities as well as makes it easier to verify that the methods used to established materiality limit are correct. Riahi-Belkaoui (2004)

Some of the external auditors prioritize the needs of the users, while making materiality evaluations. The same method is explained by ISA 320 where external auditor has to consider whether or not certain material misstatement will influence the "economic decisions of users" (IAASB, 2009a:314). This proves that external auditors act in accordance with their professional standards and thus increase their level of professional accountability Sinclair (1995:229).

While applying quantitative analysis in order to establish materiality of financial statement in software-development organizations some of the external auditors utilize size of the entity as well as take into consideration the industry, where organization operates. Each of these quantitative methods can be found in ISA 320, where in order to determine materiality limit it is necessary to evaluate "the nature" of the organization and "the industry and economic environment" where the organization operates (IAASB, 2009a:318). This is another factor that makes the external auditors more accountable to their profession.

In order to evaluate materiality the external auditors are involved in conducting a qualitative risk assessment that includes the risk of making a material misstatement by organization. The same information is confirmed by the IAASB's standard ISA 320, which suggests that while conducting risk analysis the auditor should try to identify and evaluate the

“risks of material misstatement”. (IAASB, 2009a:317). Therefore alignment of risk assessment with auditing standards makes the external auditors more accountable to their profession.

As stated in the empirical chapter the external auditors document the final level of materiality in the financial report thus increasing “verifiability” (FASB, 2008b:13) of accounting information. At the same time documentation of materiality is a process that is described by the ISA 320 (IAASB, 2009a:317). Therefore by documenting materiality threshold the external auditors ensure that they comply with norms and principles of their profession.

The process of materiality assessment

The external auditors base their materiality judgments on information, which is provided by their organizations in the form of the guidelines. By acting in congruence with these manuals the external auditors increase comparability of accounting information that they verify and at the same time they increase the quality of the service, which they provide by acting in alignment with general rules and principles established at their audit firms thus improving their professional accountability.

The researcher received contradictory results from the external auditors on whether or not the process of materiality establishment is objective or subjective matter as well as whether or not materiality is being established once during the process of the organizational audit. From one perspective some of the external auditors consider materiality as a concept, which is to a large extent dependent from the professional experience and the materiality threshold is established once before the process of the audit and usually remains a fixed amount over time.

From another perspective the materiality establishment is considered as a process, which is independent from professional background of the individual, who is engaged in evaluating materiality limits of accounting information. However, objective evaluations occur on a continual basis and the external auditors are constantly involved in assessing what is material and what is not.

However, both perspectives increase the extent to which the external auditors are accountable to their profession Caulfield (2011:17). In the first case organizations focus on a fixed amount of materiality due to the fact that they carry professional responsibility for the quality of their work and are not intended to lower the amount of accounting information verified even when there are certain circumstances that demand so. With this the external auditors increase the “reliability” (FASB, 2008b:13) of accounting information, which they verify and thus improve their professional accountability. Sinclair (1995:224) From the other perspective the external auditors evaluate the materiality threshold continuously relying on the principles of the audit firm. However, in order to be able to do so they assess, whether or not they have

sufficient organizational and human resources to be able to conduct a high quality evaluation and thus they positively impact their professional accountability as well.

Discretionary accounting items

Professional accountability is also enhanced, while assessing materiality of discretionary accounting items. The external auditors focus on assessing the nature of these type of accounts well as on assumptions that were done while establishing the materiality level of discretionary item. With that the external auditors ensure that the quality of service, which they provide to the audited organization, is high and that the accounting information is reliable and relevant (FASB, 2008a:13) and does not contain any material misstatements.

While assessing whether or not the insiders in the audited organization have not made any material misstatements, while moving their project from the research into development phase the external auditors tend to conduct a variety of different evaluations, such as estimating, whether or not the product will be able to generate sufficient cash flow as well as verifying the capabilities of organization to develop such a product. Various types of evaluations were also utilized in order to determine whether or not the software-development organization depreciates its intangible assets correctly. Therefore, by applying a large variety of different estimations and evaluations the independent auditors thoroughly verify that materiality threshold of discretionary items is established correctly and thus make sure that the insiders receive a high quality service from an independent auditor.

In order to ensure the “reliability” (FASB, 2008b:13) of accounting information the external auditors discuss materiality of discretionary and non-discretionary accounting items with their clients during specific meetings. The external auditors focus on materiality of discretionary accounting items in order to ensure that they mitigate the risk of not detecting a material misstatement and therefore improve the extent of their professional accountability.

Other

In order to ensure the corporate secrecy of verified organization as well as to protect the methods and techniques used by the audit firm the external auditors did not disclose the exact numbers used by these organizations. With that external auditors ensure the quality of service, which they deliver and thus increase their professional accountability.

The external auditors stated that in order to establish materiality limit correctly it is necessary to maintain a specific professional knowledge related to the industry, where organization operates as well as knowledge about what kind of situation the organization is in currently. The external auditors continued that they maintain such kind of know-how, which increases the extent of their professional accountability.

Personal accountability of the external auditors

As it was stated earlier the external auditors to a large extent rely on information from materiality manuals and guidelines. However, sometimes, when some of the external auditors feel that certain accounting items in organizational financial reports have a higher potential to be exposed to a possible fraud they will lower the materiality limit for them anyway, because of their personal responsibility for the quality of procedures that they deliver as well as for the outcomes of these procedures. Siegel-Jacobs and Yates (1996:14)

The researcher received contradictory findings on the impact of the external auditor's personal characteristics over the process of materiality assessment. From one perspective it is possible to conclude that materiality of accounting information will vary depending on professional experience as well as on the individual considerations of what kind of misstatement is material for the particular account. This would mean that in order to establish a correct materiality the external auditor must be highly accountable to his or her personal values and beliefs.

However, on the other hand some external auditors emphasized that while establishing materiality limit it is more common to rely on the information from the guidelines and therefore materiality threshold can be considered as independent from individual perception. To support that argument it was stated that all organizational activities concerning materiality establishment and evaluation are verified by Financial Supervisory Authority in Norway. From this line of reasoning it can be concluded that while establishing materiality the external auditors do not utilize their individual characteristics in order to enhance their personal accountability.

6.1.3. Comparing aspects of accountability

This section of the discussion chapter compares the approaches of the insiders and the external auditors, which they apply, while utilizing materiality characteristics in order to enhance their public, managerial, professional and personal accountabilities.

Comparing public accountability

The professionals, who are included in the study, are accountable to the public differently. The insiders tend to focus on aligning the materiality characteristics with the requirements of the oversight agencies, whereas the external auditors emphasize fulfilling their

role as the “oversight agency” and make sure that the audited organizations has established a correct materiality threshold.

Therefore it is possible to conclude that all professionals included in the study are held accountable to the public through to a large extent through the “horizontal” perspective Smulovitz and Peruzzotti (2000:148) that is they are accountable to specific supervisory authorities, which represent the society. This can be justified by the fact that both software-development organizations are not privately owned and are not listed on any stock exchange market. Therefore there is no need for them to be accountable directly to the public through the “vertical” perspective Smulovitz and Peruzzotti (2000:148).

Comparing managerial accountability

Materiality characteristics are used by the insiders in order to enhance accountability to their administration. Even though information asymmetry exists due to atmosphere of mutual trust and shared interests the insiders rely on capabilities of each other, while making materiality assessments.

On the other hand the external auditors tend to focus on aligning materiality with the international standards on auditing as well as use the databases of audit firms in order to align their actions with the general policy established by the administration audit firm thus also enhancing their managerial accountability, but with a different approach.

Despite the differences both groups are involved in using materiality characteristics in order to decrease the information asymmetry through different approaches and thus decrease the “moral hazard” Eisenhardt (1989:59). Both the insiders and the external auditors make sure that they align their incentives with their administrations and thus they both maintain a high extent of “managerial accountability” Sinclair (1995:224).

Comparing professional accountability

There are both differences and similarities between the approaches of the insiders and the methods of the external auditors, which they apply, while utilizing materiality characteristics in order to improve accountability to their professions. From one perspective both groups establish materiality threshold by using information from the materiality standards and align quantitative considerations and risk assessment procedures with requirements of these official documents. Both groups use their professional knowledge about software-development organizations in order to determine materiality and are interested in achievement of consensus, while discussing materiality issues.

The reliance on materiality standards by both groups can be explained by the fact that it is a part of professional responsibilities of the management personnel, the board of directors, the professional accountant and the external auditor. As stated earlier in the introductory chapter management personnel is responsible for the design of accounting information (Soltani, 2007) board of directors is responsible to monitor management activities and professional accountant carries responsibility of verifying financial statement. Additionally external auditor is responsible for verification of organization. In order to ensure the quality of these procedures these professionals must rely on materiality standards. Another factor that explains reliance on materiality standards is that all professionals, which were included in the study, have an extensive professional experience in accounting or auditing branches.

However, the role of process of materiality establishment in enhancing professional accountability varies between the insiders and the external auditors. The insiders tend to rely on various techniques used in order to match organizational accounting information with internal reports or information from other organizations. On the contrary the external auditors base their benchmarks on size of the entity and user's needs. However, as noted earlier the researcher has received contradictory findings about the process of materiality establishment by the external auditors.

The researcher also detected differences in how materiality characteristics of discretionary accounting items make the insiders and the external auditors more accountable to their professions. The insiders tend to rely on various organizational-specific principles on how to establish materiality of discretionary accounting items as well as prioritize personal in-depth knowledge about organization and nature of discretionary accounting item. On the other hand the external auditors tend to conduct a large amount of different quantitative and qualitative evaluations in order to ensure that the established materiality threshold is correct. The external auditors also try to uncover the opinions of the insiders and assumptions they have used while determining materiality threshold.

The difference between the process of materiality establishment and the materiality characteristics of discretionary accounting items can be explained by the fact that both the insiders and the external auditors are engaged in an appropriate "code of conduct" that fits their profession Caulfield (2011:17). Another factor that could explain why the external auditors establish materiality threshold differently is different working positions that are maintained by the external auditors. However, more research is needed in order to investigate this inconsistency in greater detail.

Comparing personal accountability

There are also differences on how materiality characteristics enhance personal accountability of the insiders and the external auditors. While analyzing the insider's perspective it is possible to conclude that the materiality characteristics are to a large extent dependent on the insider's personal considerations. Therefore by establishing the correct materiality threshold the insiders develop their own personal "gut-feeling" on what is an appropriate materiality threshold and what is not and thus every insider makes him or herself more accountable to personal values and beliefs.

This can be explained by that fact that the insiders have a high individual responsibility for the processes that occur in organization as well as feel that they are responsible for the consequences of those processes. Hall et al (2007:407).

The researcher has received contradictory findings on whether or not materiality characteristics influence personal accountability of the external auditors. On the one hand, similar to the insiders the materiality characteristics applied by the external auditor enhance his accountability to his values and beliefs. On the other hand the other external auditor stated that materiality characteristics and personal preferences are independent from each other and thus they do not influence personal accountability.

These differences can be explained by proposing that on the individual level the other external auditor can have different sources of personal accountability (Frink and Klimoski, 1998) that are not related to materiality characteristics. However, more research is needed in order to investigate this discrepancy in greater detail.

6.2. Contingent variables and materiality characteristics

This part of the discussion chapter analyses the materiality characteristics by utilizing contingency theory. The main propositions and concepts of this theory are outlined in the theoretical framework of this research. The researcher also compares whether or not there are any differences and similarities between perspectives of the external auditors and the insiders.

External environment

The clear majority of the insiders emphasized that due to the nature of their businesses there is not much external influence on materiality characteristics. Moreover, the insiders stated that even if there would be certain fluctuations in the environment, they would not affect the process of establishing materiality threshold and as a percentage amount it would remain a fixed

amount. However, while making considerations about materiality threshold the insiders take into account Norwegian tax and law regulations as well as their customers and competitors.

On the other hand the external auditors pay particular attention to the external environment, while considering materiality threshold and would consider whether or organization has some existing or potential owners that are localized externally and will try to uncover whether or not internal users consider their needs, while assessing materiality. The external auditors also consider the impact of Norwegian tax authorities and would lower the materiality threshold due to their strict requirements.

The researcher concludes that there are both differences and similarities on how the external auditors and the insiders assess role of the external environment, while considering materiality characteristics. Both the insiders and the external auditors take into account tax organizations due to the high degree of their possible “hostility” (Chenhall, 2003:137) to software-development organizations as well as to audit firms. The differences can be explained by the fact that the insiders tend obtain more in-depth knowledge about organizational activities than the external auditors. Therefore, for the external auditor it is important to consider all possible “turbulence” (Chenhall, 2003:137) in the external environment that can affect organizational activities.

Technology

While assessing materiality threshold the insiders tend to rely on continuous assessments of materiality characteristics. However, the insiders also tend take into consideration accounting and auditing standards, while making materiality assessments. Despite certain discrepancies the position of the external auditors is similar. They rely on their knowledge about organizational activities as well as on various techniques from auditing standards on materiality such as benchmarking materiality threshold. Besides the external auditors have large national and international databases, which can be used in order to investigate certain materiality issues. Therefore the researcher concludes that both the insiders and the external auditors consider the relationship between technology materiality. However, whereas the external auditors tend to rely more on “knowledge” and “software” (Chenhall, 2003:139) aspects of technology, the insiders emphasize the “knowledge” and “people” (Chenhall, 2003:139) perspectives, possibly due to their extensive experience about organizations, where they work.

Organizational structure

According to the insiders they do not have a very structured process of how to establish materiality and therefore rely more on a “case-by-case” approach. However, they conduct a variety of procedures, which are aimed to determine that materiality threshold is established correctly. Similarly to the insiders the external auditors are engaged in conducting various procedures that are aligned with the materiality standards. However, the external auditors also base their decisions about materiality characteristics on discussions with the management. Based on this information the researcher concludes that materiality characteristics are based both on the organizational structure, which involve both “mechanistic” and “organic” elements (Chenhall, 2003:139).

Size

In spite of significant differences in size of the software development organizations the insiders from both companies seem to establish materiality threshold similarly. The insiders from both organizations evaluate materiality threshold on a continuous basis as well as base their decisions on materiality on discussions, which include the external auditors. On the contrary the external auditors stated that materiality threshold is dependent on the size of the organization, however they are not sure, whether or not the dependence is linear. The researcher concludes that there is thus no congruence between how the insiders and the external auditors view the relationship of materiality characteristics are determined by the size of the organization.

Strategy

Both software-development organizations, where the insiders operate focus on achievement of a high quality and uniqueness of their product. Therefore, while conducting materiality threshold evaluation for discretionary accounting items, especially, while moving their projects from research into development phase, they ensure that they conduct a maximal possible amount of thorough evaluations thus lowering materiality threshold for them. On the other hand both audit firms are aimed at providing a high quality service either in order to ensure stable relationships with their customers or to differentiate from other audit organizations they do lower materiality threshold for the discretionary items as well. Therefore both the insiders and the external auditors rely on the strategy of their organizations, while making decisions on materiality characteristics.

National culture

According to the insiders establishing materiality threshold involves an achievement of consensus between them and the external auditor. However, according to the insiders both parties are interested in reporting correctly and having a materiality threshold that is aligned with accounting and tax legislation as well as with the needs of the users. This information is confirmed by the external auditors, who stated that it is of high importance to achieve trust-based relationships with their customers. These similarities can be explained by the framework of Hostede Centre (2015) that in Norway due to low power distance every discourse between the individuals or organizations is oriented towards achievement of consensus.

6.3. Summary of the discussion chapter

In this chapter the researcher analyzed what role the materiality characteristics play in enhancing public, managerial, professional and personal accountabilities. The researcher compared the insider's and the external auditor's perspectives and arrived at interesting results. There are similarities between how the external auditors and the insiders utilize materiality characteristics in order to enhance public and managerial accountabilities. Nevertheless, while establishing and assessing materiality characteristics both the external auditors and the insiders tend to focus on enhancing their professional accountability. However, there is lack of consensus between the external auditors on whether or not to establish materiality threshold on a continuous basis as well as whether or not materiality threshold depends on the individual, who is responsible for the process of its establishment. Therefore the researcher finds it difficult to compare the influence of materiality characteristics on professional and personal accountabilities of the insiders and external auditors.

The researcher also analyzed the extent to which materiality characteristics are affected by the contingent variables. The results have shown that both the external auditors and the insiders have similar perspectives on how national culture, organizational structure and strategy influence characteristics of materiality. However, their perspectives vary, while considering the role of size, technology and external environment and their relation to materiality threshold.

7. Conclusion

This empirical study has addressed challenges associated with accounting materiality threshold and the way it is utilized by practice. In particular this research has examined how the materiality threshold is established and what qualitative and quantitative factors were

emphasized by the external auditors as well as by the management personnel, the board of director's members and the professional accountants, who work in the software-development organizations. The researcher has investigated the materiality characteristics on the basis of the the following research questions:

- c. What characteristics of materiality do external auditors emphasize, while assessing materiality threshold of accounting information?
- d. What characteristics of materiality do insiders of audited organization emphasize, while assessing materiality threshold of accounting information?

In order to study the concept of materiality threshold in greater detail the researcher has compared two cases of materiality establishment. Each case included the entities that are directly involved in the process of assessing materiality threshold in the chosen software-development organizations. This included both the external auditors on the one side and the insiders (either board of director's member, management personnel or professional accountant) on the other.

During the data collection process the researcher received interesting findings, which show that there are both differences and similarities between the process of establishing materiality threshold and the qualitative and quantitative factors that are taken into consideration by the professionals included in the study. Both the external auditors and the insiders take into account risk assessment procedures, as well as their knowledge about enterprise, its activities and employees, variety of external factors (tax and law regulations, economic environment in the industry) as well as consider the needs of the users and adjust their materiality considerations for discretionary accounting items.

However, there are differences in how the insiders and the external auditors establish accounting materiality. While the former rely on the "case-by-case" approach the latter tend to conduct a variety of evaluations, which are to a large extent based on information from auditing standards on materiality. (e.g. ISA 320 or ISA 450)

The researcher analyzed the empirical findings that he obtained during the data collection process by viewing how the emphasized materiality characteristics (a concept that includes qualitative aspects, quantitative factors and the process of materiality establishment) enhance public, managerial, professional and personal accountabilities of the insiders and the external auditors. The results have shown that the majority of materiality characteristics play a role in enhancing professional accountability of the external auditors and of the insiders. However, the researcher has found that, the external auditors rely on different assumptions about accounting

materiality and therefore the materiality characteristics enhance their professional and personal accountability in a different way.

The researcher also analyzed materiality characteristics from the perspective of contingency theory. The results have shown that perspectives of the insiders and the external auditors are essentially similar, while viewing the extent to which national culture, strategy and organizational structure shape the characteristics of materiality. However, the researcher has detected a significant difference between professional's perspective on size, technology and external environment variables.

7.1. Implications, limitations and further research suggestions

As noted earlier, while conducting this study the researcher utilized different accountability perspectives as a part of his theoretical framework. One of the reasons, why both the insiders and the external auditors enhance their professional accountability by utilizing materiality is that assessment of materiality characteristics is their working responsibility and due to their extensive level of professionalism they prioritize "code of conduct", which is established by the standards of their professions. Additionally, despite certain differences between the opinions of the external auditors and the insiders the analysis has proven that materiality characteristics are determined to a large extent by the contingent variables. These results provided the researcher with a better understanding of the materiality threshold as a concept as well as how it is applied in practice.

The researcher has also managed to detect practical gap- contradictory evidence from the external auditors that maintain diametrically opposite opinion about whether or not materiality threshold should be established on continuous basis or should remain fixed during the process of the audit or whether or not the individual experience and perception are considered, while determining materiality threshold. Even though the researcher has tried to explain that with different working positions and working responsibilities there is still a very high degree of uncertainty concerning why these differences have occurred.

The findings of the research prove that materiality threshold still remains an "elusive matter" Bernstein (1967:89) and the study confirms the information obtained from Gårseth-Nesbakk and Mellempvik (2011) that there are a large variety of factors that have an impact on the materiality limit, which are dependent both on the individual, who establishes materiality as well as from on the user of accounting information and the circumstances or the context in which organization operates. However, despite dependence on various factors, as a "pervasive concept" (FASB, 2008:13) the materiality threshold affects almost all qualitative characteristics of

accounting information. For this reason accounting materiality is a highly debated topic in the accounting literature. (e.g Chewning and Higgs, 2000, Vorhies , 2005)

The theoretical gap that remains open is whether or not materiality threshold should remain a concept that is influenced by such a large variety of aspects or should it be based on highly structured calculations and guidelines. On one side this research confirmed that the dynamic business environment has an influence over the way materiality threshold is established and on the other side reliance on different techniques and considerations can decrease the extent to which accounting information is comparable and consistent. (FASB, 2008:13)

According to (Messier, Martinov-Bennie and Eilifsen, 2005) more research on materiality threshold can be done in order to explore, what impact do the different auditing guidelines have on materiality limit. Additionally, more research is needed about perception of decision-makers (e.g, member of board of directors) about accounting information and whether or not it changes if certain misstatements will be detected in footnotes or in financial statements. It is also possible to conduct causal studies in order to determine to what extent the judgment of user of financial statements and other reports is affected by the misinterpretation, over inclusion and omission of information and whether or not the perception of user about misstatement changes depending on the type of the misstatement. Moreover, more studies can be conducted in order to determine how materiality determines internal control processes and decision-making of department leader.

Another approach that can be applied is that it can be possible to study materiality characteristics by utilizing a different methodology. A promising strategy would be to use “ethnography” (Easterby-Smith et al., 2013:51) as a research design that is to become a part of researched group and by receiving an in-depth knowledge about the way organizations establish and assess materiality threshold uncover what characteristics of materiality do organizational employees rely on and why. Moreover, one can apply a different theoretical framework, while studying materiality characteristics. For instance, one can try to analyze materiality threshold by using institutional theory (see e.g. DiMaggio and Powell, 1977) in order to see how organizations and individuals legitimize themselves by establishing materiality in a certain way.

The conducted research has also a set of limitations. The researcher has managed to include the minimum amount of cases that are necessary for a comparative case study. In every particular case the researcher did not interview all of the insiders that work in the chosen software-development organization due to time-constraints and lack of human resources. The researcher has not managed to receive access to quantitative information and documentation, which includes materiality due to the fact that it was considered as a corporate secrecy both by the insiders and by the external auditors.

Lastly the researcher would like to note that due to the significant role that materiality plays in determining qualitative characteristics of accounting information and the way organizations and other entities communicate between each other it is of high importance to engage more scholars, academics and practitioners in understanding, researching and explaining all aspects of this complex phenomenon.

8. References:

- AICPA. (2006). Audit Risk and Materiality in Conducting an Audit. Downloaded 10 March 2015 from: <http://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AU-00312.pdf>.
- Bernstein, L. (1967). The concept of Materiality. *The Accounting Review*, 42(1). 86-95.
- Bloomfield, R. (2008). Accounting as the Language of Business. *Accounting horizons*. (22,4), 433-436.
- Caufield, H. (2005). Vital Notes for Nurses: Accountability (Paperback), *Blackwell Publishing*, Oxford, UK.
- Chapman, C. (1997). Reflections on a contingent view of accounting, *Accounting, Organizations and Society*, 2(22), 189-205.
- Chenhall, R. (2003). Management control systems design within its organizational context findings from contingency-based research and directions for the future, *Accounting, Organizations and Society*, 28(2/3), 127-168.
- Chewing, G., Higgs, J. (2002). What does “materiality” really mean? *The Journal of accounting and finance*, (13:4), .6-71.
- Chewning, G. E., Higgs, J. (2000). A meta-analysis of materiality studies. *Advances in Accounting*, (17), 65-90.
- Chewning, G., Pany, K., Wheeler, S. (1989). Auditor Reporting Decisions Involving Accounting Principle Changes: Some Evidence on Materiality Thresholds, *Journal of Accounting Research*, 27(1), 78-96.
- Christensen, J. (2010). Conceptual frameworks of accounting from an information perspective. *Accounting and Business Research*, 40(3), 287-299.
- Crook, R., Houtzager, P. (2001). Making Law Matter: Rules, Rights and Security in the Life of the Poor, *IDS Bulletin*, Brighton, IDS.
- Curtin, D., Nollkaemper, A. (2005). Conceptualizing accountability in international and European law. *Netherlands Yearbook of International Law*. 36. 3-20.
- DiMaggio, P., Powell, W. (1977). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Field, *American Sociological Review*, 48(2), 147-160.
- Donaldson, L. (2001). Professional accountability in a changing world. *The Journal of Continuing Medical Education*. 77, 65-67.

- Easterby-Smith, M., Thorpe, R., Jackson, P. (2012). *Management research* / Mark Easterby-Smith, Richard Thorpe and Paul Jackson. Los Angeles ; London, SAGE.
- Ebrahim, A. (2003), Accountability in practice: Mechanisms for NGOs. *World Development*. 31(5), 813-829.
- Eisenhardt, K. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57-74.
- Epstein, B. Nach R. and Bragg, S. 2006 Wiley GAAP 2007 Interpretation and Application of GENERALLY ACCEPTED ACCOUNTING PRINCIPLES. Jon Wiley and Sons. Inc. Hoboken, New Jersey.
- Epstein, B., Jermakowicz, E. (2007). Wiley IFRS 2007 Interpretation and Application of International Financial Reporting Standards, John Wiley and Sons Inc., Hoboken, New Jersey.
- FASB. (2008a). Statement of Financial Accounting Concepts no.1: Objectives of Financial Reporting by Business Enterprises. Norwalk: Financial Accounting Standards Board.
- FASB. (2008b). Statement of Financial Accounting Concepts no.2: Qualitative Characteristics of Accounting Information. Norwalk: Financial Accounting Standards Board.
- FRC. (2011). Cutting Clutter: Combating clutter in annual reports. The Financial Reporting Council Limited [PDF]. Downloaded 10 February 2015 from: <https://www.frc.org.uk/getattachment/8eabd1e6-d892-4be5-b261-b30cece894cc/Cutting-Clutter-Combating-clutter-in-annual-reports.aspx>.
- Frink, D. and Klimoski, R. (1998). Toward a theory of accountability in organizations and human resource management. *Research in personnel and human resources management*, 16, 1-51.
- Frishkoff, P. (1970). An Empirical Investigation of the Concept of Materiality in Accounting, *Journal of Accounting Research*, (8), 116-129.
- Gårseth-Nesbakk, L. and 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), 195-216
- Germain, R. (2004). Globalising Accountability within the International Organization of Credit: Financial Governance and the Public Sphere. *Global Society*. 18(3), 217-242.
- Goetz, A., Jenkins, R.(2001). Hybrid forms of accountability: Citizen Engagement in Institutions of Public Sector Oversight in India. *Public Management Review*, 3(3), 363-383.
- Hale , T. (2008). Transparency, Accountability and Global Governance. *Global Governance*. 14(1), 73-94.

- Hall, A., Bowen, M., Ferris, G., Royle, T., Fitzgibbons, D. (2007). The accountability lens: a new way to view management issues. *Business Horizons*, 50, 405-413.
- Hofstede Centre. (2015). What about Norway? Downloaded 5 April 2015 from: <http://geert-hofstede.com/norway.html> .
- Holstrum, G., Messier, W. (1982). A review and integration of empirical research on materiality. *Auditing: A Journal of Practice and Theory*, 2(1), 45-63.
- IAASB. (2009a). International standard on auditing 320 Materiality in planning and performing an audit. New York, International Accounting and Assurance Standards Board.
- IAASB. (2009b). International standard on auditing 450 Evaluation of misstatements identified during the audit. New York, International Accounting and Assurance Standards Board.
- IAASB. (2011). The Evolving Nature of Financial Reporting: Disclosure and Its Audit Implications [PDF Discussion Paper]. Downloaded 10 February 2015 from: http://www.ifac.org/system/files/publications/exposure-drafts/IAASB-Disclosures_Discussion_Paper.pdf .
- IASB. (2010). International Accounting Standard 38, London, UK. Downloaded 3 April 2015 from: http://ec.europa.eu/internal_market/accounting/docs/consolidated/ias38_en.pdf .
- Iselin, E. and Iskandar, T. (2000). Auditors' recognition and disclosure materiality thresholds: their magnitude and the effects of industry. *British Accounting Review*, (32), 289-309.
- Johansen, T. R., Plenborg, T. (2013). Prioritising disclosures in the annual report. *Accounting and Business Research*, 43(6), 605-635.
- Jun, M. (2012). Three Roads to Political Accountability. *Social Sciences in China*, 33(2), 5-24.
- Kenneth, C. Brad, J. (2000). Clarifying and protecting materiality standards in financial statements: A review of SEC Staff Accounting Bulletin 99, *The Business Lawyer*, 55(3), 1039-1064.
- Kinserdal, A. (1994) Basic accounting understanding, Grafisk Hus AS, Bergen, Norway.
- Mahlmeister, L. (1998). Professional Accountability and Legal Liability for the Team Leader and Charge Nurse. 28(3), *JOGNN Clinical Issuess*, 28(3), 300-309.
- Mellemvik, F., Monsen, N., Olson, O. (1988). Functions of Accounting: A Discussion. *Scandinavian Journal of Management* 4(3/4), 101-119.
- Messier, F. , Martinov –Bennie, N., Eilifsen, A. (2005). A Review and Integration of Empirical Research on Materiality: Two Decades Later. *Auditing: A journal of practice and theory*, 24(3), 153-187.

- Morgan, G. (1988). Accounting as reality construction: Towards a new epistemology for accounting practice. *Accounting, Organizations and Society*, 13(5), 477-485.
- Mulgan, R. (2000). 'Accountability': An ever-expanding concept?. *Public Administration*, 78(3), 555-573.
- Needles, B., Powers, M., Crosson, S. (2012) Principles of accounting. South-Western, Cengage Learning.
- Newell, P., Wheeler, J. (2006). Rights, Resources and the Politics of Accountability. Zed Books Ltd, London, UK.
- Newman, J. (2004). Constructing Accountability: Network Governance and Managerial Agency, *Public Policy and Administration*, 19(4), 17-33.
- Page, S. (2006). The web of managerial accountability: The impact of Reinventing Government. *Administration and Society*, 38(2), 166-197.
- Pany, K., Wheeler, S. (1989). A comparison of various materiality rules of thumb. *The CPA Journal*, 59(6), 62-63.
- Riahi-Belkaoui, A. (2004). Accounting Theory [5th ed.]. Hampshire: Cengage Learning.
- Rose, J., Beaver, W., Becker, S., Sorter, G. (1970). Toward an Empirical Measure of Materiality. *Journal of Accounting Research*, (8), 138-148.
- Sappington, D. (1991). Incentives in Principal-Agent Relationships. *The Journal of Economic Perspectives*, 5(2), 45-66.
- Schroeder, R. and Clark, M. (1998) Accounting theory: texts and readings [6th ed.]. New York: John Wiley & Sons.
- SEC. (1999). SEC Staff Accounting Bulletin: No 99- Materiality. Downloaded 10 March 2015 from: <https://www.sec.gov/interps/account/sab99.htm> .
- Shapiro, S. P. (2005). Agency Theory. *Annual Review of Sociology*, 31, 263-284.
- Siegel-Jacobs, K. and Yates, F. (1996). Effects of Procedural and Outcome Accountability on Judgment Quality. *Organizational behavior and human decision processes*, 61(1), 1-17.
- Sinclair, A. (1995). The Chameleon of Accountability: Forms and Discourses. *Accounting, Organizations and Society*, 20(2/3), 219-237.
- Smith, M. (1996). Qualitative characteristics in accounting disclosures: a desirability tradeoff. *Managerial Auditing Journal*, 11(3), 11-16.

Smulovitz, C., Peruzzotti, E., (2000). Societal accountability in Latin America. *Journal of Democracy*.11(4), 147-158.

Soltani, B. (2007). *Auditing: An International Approach*. Essex, England, Pearson Education Limited.

Statistics Norway. (2014). Information sector, business statistics, 2012. Downloaded 5 March 2015 from: <https://www.ssb.no/en/teknologi-og-innovasjon/statistikker/iktoms/aar/2014-08-12>

Terry Grant, C., Depree, M., Grant, G. (2000). Earnings Management and the Abuse of Materiality, *Journal of accountancy*, 190(3), 41-44.

Vorhies., J. (2005) The New Importance of Materiality. *Journal of accountancy*, 199(5), 53-59.

Yin, R. (2014). *Case study research: design and methods/ Robert K. Yin.- Fifth edition*. London; New Dehli, SAGE.

Young, J. J. (2006). Making up users. *Accounting, Organizations and Society*, (31), 579-600.

Appendix 1: Interview guides

Board of directors

1. Can you explain what your job position is?
(Kan du fortelle om stillingen din?)
2. How does the process of materiality evaluation in financial statement look like?
(Hvordan prosessen av vesentlighetsvurdering sier ut?)
3. What are the five most important criteria that influence your materiality considerations?
(Kan du benevne de fem viktigste faktorer, som påvirker vesenlighetsanalysen din?)
4. How do your personal characteristics influence your materiality considerations?
(Hvordan personlige karakteristikk dine påvirker vesenlighetsbetraktninga di?)
5. Do you participate directly in the process of materiality establishment?
(Deltar du direkte i vesentlighetsetablering prosess?)
YES(Ja):
 - 1) Can you tell me about trade-offs that are made in practice between the ideal or theoretical way of preparing financial statements and pragmatic considerations being made?
(Kan du fortelle om kompromisser, som ble gjort under vesentlighetsetableringprosess, når du trenger å velge mellom teoretiske måte av regnskapetsforberedelse og pragmatiske betraktninger?)
 - 2) How does your perception of materiality threshold change throughout the process of preparation of financial statement?
(Hvordan persepsjonen din av vesentlighetsgrense endres over hele prosessen av regnskapsforberedelse?)
6. Can you tell about the differences in opinions between you and external auditor that arise, while you discuss materiality of certain misstatements and omissions in financial statements?
(Kan du fortelle om situasjoner, når du og ekstern revisor har forskjellig synespunkter om noe feilinformasjon eller utelatelse i regnskapet?)
7. Can you tell about the differences in opinions between you and management personnel that arise, while you discuss materiality of certain misstatements and omissions in financial statements?
(Kan du fortelle om situasjoner, når du og leder har forskjellig synespunkter om noe feilinformasjon eller utelatelse i regnskapet?)
8. What are the differences between evaluating materiality for discretionary and non-discretionary accounts?
(Hva er en forskjell mellom vurdering vesentligheten av skjønnsmessige kontoer og ikke skjønnsmessige kontoer i regnskapet?)
9. What sources of information do you use to evaluate materiality of discretionary items?
(Hvilke informasjonskilder bruker du for å vurdere vesentligheten av skjønnsmessige kontoer i regnskapet?)
10. How does the context and circumstances influence your considerations of some misstatement as material?
(Hvordan miljøet påvirker synespunkten din av noe feilinformasjon i regnskapet som vesentlig ?)
11. Does the type of error in financial statement influence your materiality considerations?
(Påvirker den typen av feilen i regnskapet vesentlighetsbetraktninga di?)
12. As a final user of accounting information what do you pay particular attention to, while analyzing financial statements with regard to materiality?
(Hva tar du, som regnskapsbruker hensyn til, når du vurderer regnskapinformasjon i relasjon til vesentligheten i regnskapet?)

13. What considerations do you make in relation to accounting users, while considering materiality threshold?
(Hvilke betraktninger gjør du i relasjon til brukere av regnskap informasjon, mens du vurderer vesentlighetsgrense?)

Professional accountant

1. How does the process of materiality establishment look like?
(Hvordan prosessen av vesentlighetsetablering sier ut?)
2. What are the five most important criteria that influence your materiality considerations?
(Kan du benevne de fem viktigste faktorer, som påvirker vesenlighetsanalysen din?)
3. How do your personal characteristics influence your materiality considerations?
(Hvordan personlige karakteristikk dine påvirker vesenlighetsbetraktninga di?)
4. Can you tell me about trade-offs that are made in practice between the ideal or theoretical way of preparing financial statements and pragmatic considerations being made?
(Kan du fortelle om kompromisser, som du gjør under vesentlighetsetableringsprosess, når du trenger å velge mellom teoretiske måte av regnskapetsforberedelse og pragmatiske betraktninger?)
5. How does your perception of materiality threshold change throughout the process of preparation of financial statement?
(Hvordan persepsjonen din av vesentlighetsgrense endres over hele prosessen av regnskapsforberedelse?)
6. What common challenges and problems in your professional practice can you name that prevent achievement of consensus between you and external auditor, while negotiating certain misstatements?
(Kan du benevne noe problemer i profesjonelle praksisen din, som tillater ikke å oppnå konsensus mellom deg og ledere, mens dere diskuterer noen feilinformasjon i regnskapet?)
7. If a misstatement has been identified, how do you and the external auditor resolve it?
(Hvis noen feilinformasjon i regnskapet var indetifisert, hvordan du og revisor løser dette problemet?)
8. How do you assess subjective nature of certain accounting information while preparing financial statement?
(Hvordan vurderer du den subjektive naturen av noen regnskapinformasjon, mens du forbereder regnskapet?)
9. While preparing financial statement what are the differences between establishing materiality threshold for discretionary and non-discretionary accounting items?
(Hva er en forskjell mellom etablering vesentligheten av skjønnsmessige kontoer og ikke skjønnsmessige kontoer i regnskapet?)
10. What sources of information do you use to establish materiality of discretionary items?
(Hvilke informasjonskilder bruker du for å etablere vesentligheten av skjønnsmessige kontoer i regnskapet?)
11. How does the context and circumstances influence your considerations of materiality threshold of accounting information?
(Hvordan miljøet påvirker synspunktet din av noe feilinformasjon i regnskapet som vesentlig ?)
12. What considerations do you make in relation to accounting users, while considering materiality threshold?
(Hvilke betraktninger gjør du i relasjon til brukere av regnskap informasjon, mens du vurderer vesentlighetsgrense?)

Management personnel

1. Can you explain what your job position is?
(Kan du fortelle om stillingen din?)
2. Can you describe how the organization works?
(Kan du beskrive hvordan organisasjonen fungerer?)
3. Is accounting information prepared by a professional accountant firm?
(Er regnskapinformasjon utarbeidet av et profesjonell regnskapfirma?)
YES(JA):
 - 1) How does the professional accountant firm comply with accounting standards?
(Hvordan det profesjonelle regnskapsfirma oppfyller regnskapsstandarter, når de utarbeider regnskapet for dette firma?)
 - 2) How often do meet the representative from professional accounting firm?
(Hvor ofte møtes du med medarbeider av det profesjonelle regnskapsfirma?)
 - 3) How does the process of recording accounting events or transactions look like?
(Kan du fortelle om dokumenteringsprosessen av forskjellig regnskapshendelser eller transaksjonen?)
 - 4) How do the bookkeepers present accounting information to the client?
(Hvordan regnskapsfører presenterer regnskapsinformasjon til deg som kunde?)
 - 5) What do pay particular attention to, when you get the accounts?
(Når du får regnskapinformasjon, hva tar du hensyn til?)
 - 6) What type of issues does the professional accountant firm pay particular attention to?
(Hvilke problemer eller emner tar medarbeider av profesjonelle regnskapsfirma i betraktning?)
 - 7) Does it happen that the circumstances make difference with regard to accounting information?
(Skjer det at miljøet rundt organisasjon påvirker regnskapsinformasjon?)
4. How does the process of materiality establishment look like?
(Hvordan prosessen av vesentlighetsetablering sier ut?)
5. What are the five most important criteria that influence your materiality considerations?
(Kan du benevne de fem viktigste faktorer, som påvirker vesenlighetsanalysen din?)
6. How do your personal characteristics influence your materiality considerations?
(Hvordan personlige karakteristikk dine påvirker vesenlighetsbetraktninga di?)
7. Can you tell me about trade-offs that are made in practice between the ideal or theoretical way of preparing financial statements and pragmatic considerations being made?
(Kan du fortelle om kompromisser, som du gjør under vesentlighetsetableringprosess, når du trenger å velge mellom teoretiske måte av regnskapetsforberedelse og pragmatiske betraktninger?)
8. How does your perception of materiality threshold change throughout the process of preparation of financial statement?
(Hvordan persepsjonen din av vesentlighetsgrense endres over hele prosessen av regnskapsforberedelse?)
9. What common challenges and problems in your professional practice can you name that prevent achievement of consensus between you and external auditor, while negotiating certain misstatements?
(Kan du benevne noe problemer i profesjonelle praksisen din, som tillater ikke å oppnå konsensus mellom deg og ledere, mens dere diskuterer noen feilinformasjon i regnskapet?)
10. If a misstatement has been identified, how do you and the external auditor resolve it?
(Hvis noe feilinformasjon i regnskapet var indetifisert, hvordan du og revisor løser dette problemet?)

11. How do you assess subjective nature of certain accounting information while preparing financial statement?
(Hvordan vurderer du den subjektive naturen av noen regnskapinformasjon, mens du forbereder regnskapet?)
12. While preparing financial statement what are the differences between establishing materiality threshold for discretionary and non-discretionary accounting items?
(Hva er en forskjell mellom etablering vesentligheten av skjønnsmessige kontoer og ikke skjønnsmessige kontoer i regnskapet?)
13. What sources of information do you use to establish materiality of discretionary items?
(Hvilke informasjonskilder bruker du for å etablere vesentligheten av skjønnsmessige kontoer i regnskapet?)
14. How does the context and circumstances influence your considerations of materiality threshold of accounting information?
(Hvordan miljøet påvirker synspunkten din av noe feilinformasjon i regnskapet som vesentlig ?)
15. What considerations do you make in relation to accounting users, while considering materiality threshold?
(Hvilke betraktninger gjør du i relasjon til brukere av regnskap informasjon, mens du vurderer vesentlighetsterskel?)

External auditors

1. How does the process of materiality establishment in financial statement look like?
(Hvordan prosessen av vesentlighetsetablering sier ut?)
2. What are the five most important criteria that influence your materiality considerations?
(Kan du benevne de fem viktigste faktorer, som påvirker vesenlighetsanalysen din?)
3. How do your personal characteristics influence your materiality considerations?
(Hvordan personlige karakteristikk dine påvirker vesenlighetsbetraktninga di?)
4. What common challenges and problems in your professional practice can you name that prevent achievement of consensus between you and management personnel, while negotiating certain misstatements?
(Kan du benevne noe problemer i profesjonelle praksisen din, som tillater ikke å oppnå konsensus mellom deg og lederer, mens dere diskuterer noen feilinformasjon i regnskapet?)
5. While conducting audits what are the differences between establishing materiality for discretionary and non-discretionary accounts?
(Hva er en forskjell mellom etablering vesentligheten av skjønnsmessige kontoer og ikke skjønnsmessige kontoer i regnskapet?)
6. What sources of information do you use to establish materiality of discretionary items?
(Hvilke informasjonskilder bruker du for å etablere vesentligheten av skjønnsmessige kontoer i regnskapet?)
7. How does the context and circumstances influence your considerations of some misstatement as material?
(Hvordan miljøet påvirker synspunkten din om noe feilinformasjon i regnskapet som vesentlig ?)
8. Does the type of error in financial statement influence your materiality considerations?
(Påvirker den typen av feilen i regnskapet vesentlighetsbetraktninga di?)
9. What considerations do you make in relation to accounting users, while considering materiality threshold?
(Hvilke betraktninger gjør du i relasjon til brukere av regnskap informasjon, mens du vurderer vesentlighetsgrense?)
10. Do you apply a general model of materiality establishment or do you do an in-depth analysis of attributes in a particular organization?

(Bruker du en generell modell av vesentlighetstablering eller analyserer du spesifikke egenskaper av bestemt organisasjon?)

11. What other qualitative factors do you take into account while establishing and evaluating materiality threshold of verified financial statements?

(Hvilke andre kvalitative faktorer betrakter du, mens du etablerer og vurderer vesentlighetsgrense i regnskapet?)

12. How do you assess risk of material misstatement, while performing financial statement audit?

(Hvordan vurderer du risikoen av vesentlig feilinformasjon, mens du reviderer regnskapet?)