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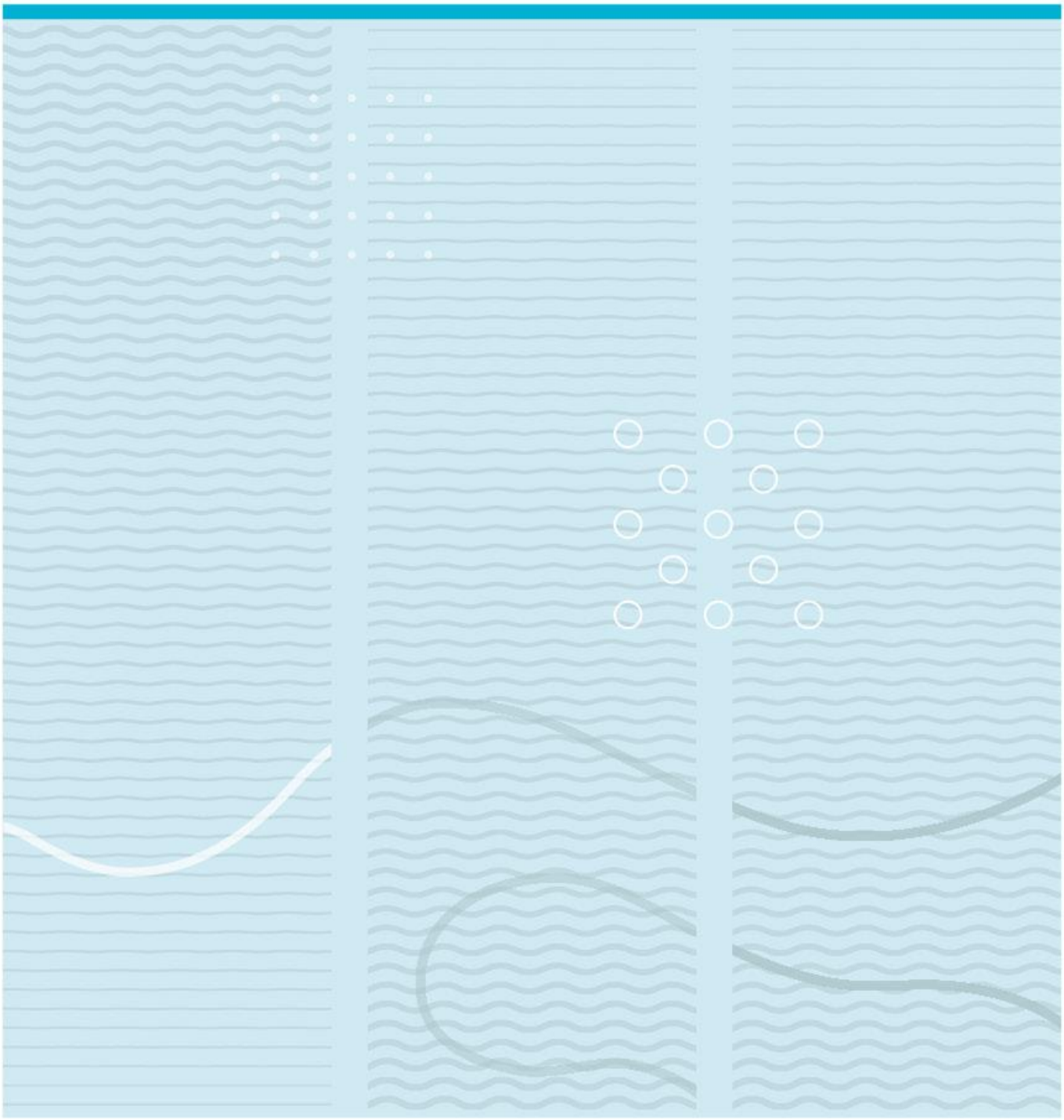
A Compliance Function Maturity Model



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This thesis is worth 30 study points

Abstract

In the Norwegian financial market, the MiFID II directive requires firms to implement a series of systems and controls aimed at securing a robust governance framework. This includes policies and procedures to ensure regulatory compliance and the establishment of a permanent, independent, and *effective compliance function* (ESMA, 2020b, p. 6).

However, the establishment of an effective compliance function is not solely a requirement from the authorities that for firms represents a necessary evil. Previous research proves that there is a connection between compliance and firms' profitability and performance (Antonsen, 2020). For that reason, it is seen as important to organize the compliance function to be as effective as possible.

Motivated by this, the current research project aims to develop a maturity model for assessing the maturity of the compliance function within Norwegian investment firms. This, based on the assumption that effectiveness increases with maturity.

Using a narrative literature study to examine previous research on the development of maturity models, the development of a compliance function maturity model was completed by looking to frameworks suggested in existing literature. As part of this, a case study method was used to test the model in practice.

Findings from this research show how the effectiveness of the compliance function can be evaluated using a maturity model. By looking to previous research, ideas from compliance practitioners, and guidelines from the authorities, a path of evolution where the compliance function matures from being reactive and inconsistent to it becoming a proactive and integrated part of a firm's business endeavors is indicated.

Used in the assessment of the compliance function within a relevant case firm, the suggested model – the CFMM – proved to be compatible with practice. As such, the CFMM represents an improvement framework that can help its intended audience with identifying where a firm's compliance function stands as of today and further provide guidelines for its improvement. This further implies that the development process, which was inspired by previous research, helped develop a model that was both usable and useful. As such, the findings of this study also recognize the measures suggested by other scholars for developing theoretically and empirically validated maturity models.

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Preface

"You are about to spend a lot of hours working on your master thesis, so make sure that you chose a subject that you find interesting, and which you feel excited about sharing with others!"

That was the advice I was given from an older student last year when asking for advice regarding what I had in store for my last year as a master's student in Business and Administration at the University of South-eastern Norway.

Today, after a long but equally educative period of writing this master thesis - I am excited to share with you what I have learned. But, before that, I would like to hand out my gratitude to those who have helped me along the way.

First, I would like to thank my supervisor, Dag Øivind Madsen, who has been available for guidance throughout the process. His feedback and encouragement have been valuable – especially in periods when a discussion partner has been needed the most.

Next, to the participants of the case study. I would like to thank the case firm for allowing me to gain insight into its structure, processes, and organization of a business function as important as the compliance function. That is not something I take for granted. Especially, my gratitude goes out to Head of Compliance and Risk within the firm, for taking the time to answer all of my questions thoroughly, and for the many interesting discussions along the way. Without the knowledge and experience of this person, this paper could not have been completed as it is today.

And at last, a big thank you to my family and my partner for supporting me through the years I have spent as a student. Knowing that you believe in me has been a great motivator along the way.

Oslo, 01.06.2021

Helena Holter Antonsen

1 Introduction

As an introduction to this master's thesis, the first chapter will provide information on the background and motivation for doing this research as well as a brief description of the research problem and scope. The latter will elaborate on the objectives, research questions, and limitations of the study.

1.1 Background and motivation

Today's business environment is increasingly more regulated and expectations for ethical and sustainable activities from society in general are more evident than ever (PwC, 2016). In the Norwegian financial market, the MiFID II directive requires firms to implement a series of systems and controls aimed at securing a robust governance framework through a clear organizational structure, lines of responsibility, and effective risk management processes (ILA Norge, 2015). This includes policies and procedures to ensure regulatory compliance and the establishment of a permanent, independent, and *effective compliance function* (ESMA, 2020b, p. 6).

As the business environment evolves, stakeholders expect firms to be flexible and quickly move to adopt sophisticated and effective measures answering to all new demands in their industry (Blum, 2020). Research (See: Antonsen, 2020) also point out that firms who are responsive to changes and develop in accordance with them often emerge as winners in their industries (Drnevich & Kriauciunas, 2011; Teece et al., 1997). However, such a change is not made overnight. Just as small children must learn to crawl before walking, firms must take their processes through a maturation process to enable sophisticate and effective measures (Blum, 2020). This also applies to the development of an effective compliance function. Further, the notion of "effective" must also be considered. What measures must the firms resort to for satisfying the requirements for organizing an effective compliance function – and what are the requirements?

From the above, this study aims to develop a compliance function maturity model for application within Norwegian investment firms. The model will be based on current legislation and prescribed guidelines from regulatory authorities, as well as ideas from practitioners, describing how to organize an effective compliance function. This, by assuming that effectiveness increases with maturity.

For the model to encompass the complexness of real-world environments, empirical data from a case study involving a Norwegian investment firm will be used to test the model. Such a case study will not only be valuable in testing the model, but it will also provide the firm with a better understanding of where their compliance function stands as of today. In addition, having mapped its current level of maturity, the model will also provide guidelines with implications on how the firm might improve its compliance function to become more effective.

The motivation behind developing a compliance function maturity model is based upon work with the preliminary project related to this master thesis. Throughout the autumn of 2020, a thorough literature review on the connection between a firm's competitive advantage and its' compliance initiatives were conducted. The review first and foremost illustrated that there is a widely accepted belief, among both researchers and compliance practitioners, that there is a connection between compliance and a firm's profitability and performance. Using Barney's (1991) VRIO-framework to assess the connection further, it became evident, that for the compliance function to lay a foundation for a competitive advantage - it must be organized in a way that allows the firm to take full advantage of it. In this, it lies that the top management group is able to organize, allocate, and structure capabilities and resources in a way that enables this. And for that purpose, what is called the descriptive and prescriptive purposes of a maturity model can make it an important tool for firms in search of improvement.

1.2 Research problem and scope

1.2.1 Objectives

The main objective of this research project is the development of a compliance function maturity model. However, to complete such an objective, smaller objectives must be achieved along the way. One can see these objectives as milestones to be completed during the project period. Hence, other than developing a compliance function maturity model, the objectives are (1) to test the suggested model in a real-life case (a Norwegian investment firm), (2) to evaluate the model based on empirical data from that case, and (3) to evaluate the compliance function of the case firm, using the model.

1.2.2 Research questions

Research questions make a formal statement about the goal of the study, identifying clearly what the researcher intends to learn. In other words, they summarize what is unknown that requires further exploration (Savin-Baden & Major, 2012, p. 99). As such, articulating an investigable question that captures the topic and the purpose of the research is critical to the research endeavor.

Using the purpose statement template of Creswell (1998), the purpose of this research project is to develop and test a maturity model for the compliance function in Norwegian investment firms. At this stage in the process, it is known that there is a connection between compliance and firms' profitability and performance (i.e., its competitive advantage), and for that reason, that it is important to organize the compliance function to be as effective as possible. Research on internal control and compliance also addresses questions on how this ought to be done, and ideas in form of frameworks and guidelines on how to organize the firm's compliance initiatives are provided by both academia and practitioners on the field.

Based on this, two different - but complementary - research questions are formulated for this study:

RQ 1) How can the effectiveness of the compliance function within Norwegian investment firms be evaluated using a maturity model?

RQ 2) What is the state of the compliance function within the selected case firm as of today, and how can the function possibly be improved to be more effective?

The first question calls for a literature study on how to develop a maturity model, complemented by knowledge from a previously conducted literature review on how to gain a competitive advantage from the way in which a firm's compliance function is organized.

To answer the second research question, on the other hand, the model which will be developed is tested in a real-life situation. This is important because the model will be developed based on theoretical data solely (i.e., existing research and literature on the field), and therefore, it is not sure whether it will be compatible in practice. A case study involving a Norwegian investment firm is thought to give implications on whether the model reflects real-life situations and can be used for both the as-is assessment and as an improvement framework – which is what research question number two is asking for.

1.2.3 Limitations

When describing the scope of the project, it is not sufficient to talk solely about what will be done. Also, limitations to the project should be presented.

Typically for master's thesis, they are limited when it comes to time and resources. Having conducted a literature review on the modeling process of maturity models, it has become evident that most research projects involving the development of such models are lengthy and involve a range of different methodological procedures (e.g., Solli-Sæther & Gottschalk, 2015). The current research project was initiated in January 2021 and submitted on 1 of June 2021 – i.e., its timeframe is approximately 20 weeks. This has naturally limited the extensiveness of the research project and study.

Further, for students writing their master's thesis this year, it is inevitable not to mention the current situation of Covid-19 which has led to the society locking down. This has also had its implications for the research endeavor. For example, it has not been conducive to use focus group interviews – which is one of the techniques suggested by the literature on the modeling process for maturity models. Also, when one-to-one interviews are conducted, they should preferably be carried out digitally (through the use of videoconferences, telephone interviews, etc.). With the goal of interviews being to replicate in a research setting the elements of a natural conversation (Bryman et al., 2019, p. 357), carrying them out digitally might be thought to diminish that effect.

Nevertheless, by being solution-oriented and adapting the research problem and subsequent methodological techniques, the study was completed in a satisfactory way, well before the assignment's deadline.

Limitations of the study which are due to constraints on research design, or which have come as a result of issues with the researcher will be elaborated on later, towards the end of this paper.

1.3 Structure

This last subchapter provides an overview of the structure of the paper, which is built up around the objectives and associated research questions. The choice to do it this way has been made for the reader to better understand and follow the research process. Mainly, the paper is divided into two parts, A and B, each of which is related to one of the research questions set up in Chapter 1.2.2.

In Part A, RQ1 will be in focus. This means that the focus here will be on developing a maturity model that can be used to assess the maturity of the compliance function within Norwegian investment firms. To do this, Part A will start by explaining what maturity models are, and why they are considered important tools in many different industries. Furthermore, a literature study on the development process of such models will be presented as a basis for the development of a compliance function maturity model. Rounding up Part A, the suggested compliance function maturity model – The CFMM – is presented in chapter 5.

In Part B, empirical data from the case study conducted to answer RQ2 is presented. In doing so, Part B constitutes discussions on the findings that can be related to both of the research questions. This, because the empirical data will provide information necessary to evaluate both the compliance function of the case firm and the model developed in Part A. To come to a conclusion – the last chapter will summarize whether the objectives of the study are met, and research questions are answered. It will be commented on the study's contribution (i.e., both theoretical, practical, methodological implications) as well as its limitations. Finally, suggestions for future research will be provided.

Before this, however, key concepts and methodological choices for this research project will be elaborated on and explained more closely.

2 Key concepts

In this chapter, key concepts that play an important role in the field of risk management and compliance will be defined and explained more closely. The concepts that will be elaborated on have been selected because they represent an important part of this thesis. A good understanding of what these concepts entail will make it easier to understand the complexity and the various elements that are part of organizing an effective compliance function.

2.1 Internal control and compliance

The compliance function is a crucial function within firms, responsible for identifying, assessing, monitoring, and reporting on the firms' compliance risk (ESMA, 2020b, p. 4). It entails compliance with both external[1] and internal[2] regulations and is established to help

[1] By external regulations, one thinks first and foremost of laws, regulations and decisions made by public authorities on the basis of laws and regulations. Some also include industry norms / standards and requirements in customer and supplier contracts in the term (IIA Norge, 2015).
[2] Policy, guidelines and instructions from the board and management.

management to prepare and implement an effective internal control system to manage the risk of violating those regulations.

The term internal control, as used above, encompasses far more of the management aspect than what is often narrowly understood as internal control measures. If one is to understand the concept of internal control, one must see the connection between goals, risk, management, and internal control measures (DFØ, 2009, p. 4). COSO defines internal control as:

"A process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance" (Msib & Foster, 2019, p. 7).

However, there is a possibility – or a risk - that an event will occur that adversely affect the achievement of objectives (COSO, 2004). With compliance objectives pertaining to adherence to laws and regulations to which the entity is subject – one can understand compliance risk as The Basel Committee on Banking Supervision (BIS) defines it:

"The risk of legal or regulatory sanctions, financial loss, or loss to reputation an organization may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory organization standards, and codes of conduct applicable to its activities" (Singh, 2005, p. 7).

The above definition points out how failure to comply with laws, rules, and standards might expose the firm to loss of reputation. This coincides with compliance risk also sometimes being referred to as integrity risk. The backdrop is that many compliance regulations are enacted to ensure firms' fair and ethical operation (TechTarget, 2014). And, throughout history, we have several examples of how firms' failure to answer to those regulations has exposed both them and their stakeholders to great losses (Steinberg, 2011).

2.2 Regulation of Norwegian Financial Instruments Market

Having understood the concept of compliance risk and the related responsibilities of the compliance function – it follows that one should also know the rules and standards which apply to these firms, to further be able to evaluate how effective the function is.

2.2.1 MiFID II

In the run-up to the financial crisis in 2008, The Markets in Financial Instruments Directive (MiFID) was introduced in the EU to set stricter regulations for securities trading, strengthen investor protection, and promote transparent markets. The directive was implemented on November 1 2007 and was seen as the cornerstone of European capital market regulations (Directive 2014/65/EU, 2014; EY, 2015).

On the other side of the Atlantic Ocean, on September 15, 2008, Lehman Brothers filed for bankruptcy, Bank of America announced its acquisition of Merill Lynch, and the day after the Federal Reserve bailed out AIG. On September 17, the markets were in free-fall and the financial crisis was a factum (Karp et al., 2018). Not long thereafter, regulatory bodies at an international level agreed that weaknesses in corporate governance in several financial institutions, including the absence of effective checks and balances within them, had been a contributory factor to the financial crisis (Directive 2014/65/EU, 2014).

Therefore, in the aftermath of the financial crisis in 2008, the need for a revised directive was seen as necessary due to the shortcomings in regulation and supervision of the financial industry in the EU. As a result, MiFID II entered into force in the EU and EEA on 3 January 2018 and was later implemented in Norwegian law on January 1, 2019 (BAHR, 2017).

Structure and scope

The scope of MiFID II is determined by the terms "financial instruments" and "investment services". These terms are defined in the Securities Trading Act §§ 2-1 and 2-2. One can shortly describe financial instruments as assets that can be traded. They come in the form of real or virtual documents representing a legal agreement involving any kind of monetary value (Kenton, 2020). Investment services thus become services associated with financial instruments. This may apply to the receipt and dissemination of orders (Securities Trading Act § 2-1 first paragraph no. 2), proprietary trading (Securities Trading Act § 2-1 first paragraph no. 3), active management (Securities Trading Act § 2-1 first paragraph no. 4), investment advice (Securities Trading Act § 2-1 first paragraph no. 5) and corporate (Securities Trading Act § 2-1 first paragraph no. 6).

As such, a wide range of firms that provide investment services related to one or more financial instruments will to some extent be covered by MiFID II. The below figure shows which firms are included (BAHR, 2017, p. 7).

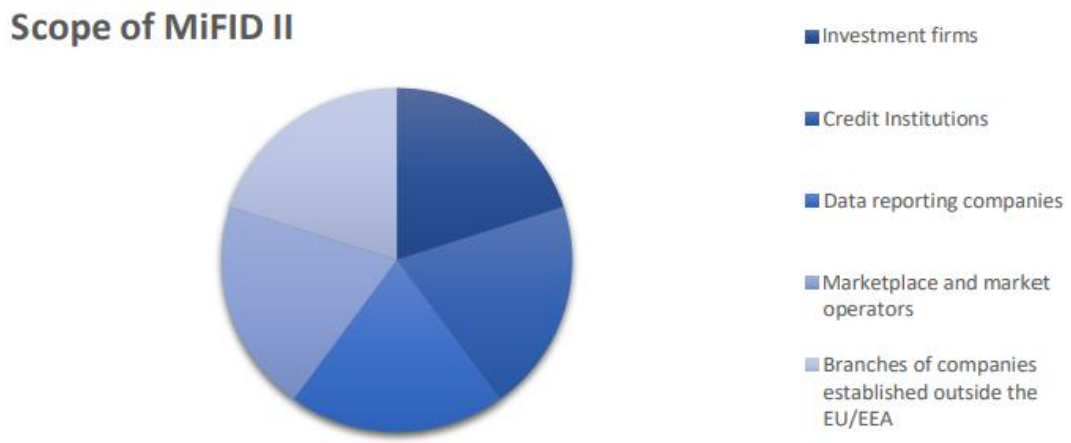


Figure 1: Firms affected by MiFID II (Sectors of the pie chart do not correspond to the actual number of firms of each type).

Investment firms, which are in focus in this thesis, are defined in the Securities Trading Act § 2-7 first paragraph and are hereinafter used to refer to firms that provide one or more investment services to third parties or conduct investment activities on a commercial basis.

When it comes to the structure, EU regulations that apply in the Norwegian financial market are categorized in levels one to three. MiFID II (directive) and MiFIR (regulation) have been implemented in Norwegian law through the Securities Trading Act, and hence, they are referred to as level 1 rules in the securities market (Finanstilsynet, 2017).

Commission directives and commission regulations are level 2 rules, which specify and supplement the framework provisions in MiFID II and MiFIR. Level 2 rules related to MiFID II and MiFIR are mainly introduced into Norwegian law through the Securities Regulations (Schjødt, 2018). Lastly, common guidelines and recommendations – like those drawn up by The Europeans Securities and Markets Authority[3] are considered level 3 rules and have approximately the same position as circulars from the Norwegian Financial Authority (Finanstilsynet, 2017).

As understood from the above, MiFID II is one of the more comprehensive EU directives and regulations as of today. As such, it regulates several areas that are not relevant to the research problem of this thesis. Therefore, the focus in the chapters to come will be on those parts of the directive that aims to secure a robust governance framework - further limited to what is relevant for the organization of the compliance function within investment firms specifically.

[3] Hereafter referred to as ESMA.

Compliance function requirements set out in MiFID II

MiFID II requires firms to implement a series of systems and controls to secure a robust governance framework with a clear organizational structure and lines of responsibility, and effective risk management and compliance processes (ESMA, 2020b, p.6). These systems include policies and procedures to ensure regulatory compliance and the establishment of a permanent independent and effective compliance function.

What these policies and procedures involve is set out in Directive 2014/65/EU[4] Article 16 and the Commission Delegated Regulation (EU) 2017/565[5] Article 22. The requirements brought fore are further implemented in Norwegian law through the Securities Trading Act § 9-16 and in the Regulations to the Securities Trading Act § 2-7. I.e., they are level 1 and 2 regulations.

MiFID II Article 16(2), on organizational requirements, sets out that investment firms shall establish adequate policies and procedures sufficient to ensure compliance of the firm with its obligations under MiFID II. According to Article 22(1) in MiFID II Delegated Regulation, this includes the firm detecting any risk of failure by the firm to comply with these obligations and put in place adequate measures designed to minimize such risk. Following this, Article 22(2) requires the firm to establish and maintain a permanent and effective compliance function to handle these risks and sets out specific responsibilities that follow from that task.

Firstly, the compliance function is held responsible for monitoring and assessing the adequacy and effectiveness of the measures, policies, and procedures mitigating compliance risk. This also involves the actions taken to address any deficiencies in the firm's compliance with its obligations. Naturally, it follows that the function is responsible for advising and assisting employees who carry out the relevant activities covered by the obligations of the MiFID II directive. For this to work effectively, the compliance function must - in accordance with paragraph 3 of MiFID II Delegated Regulation Article 22 - have the necessary authority, expertise, resources, and access to relevant information.

Furthermore, it is a prerequisite that there should be a direct connection between the compliance function and the management body[6] as the overall, responsible corporate body because this is an integral part of ensuring that the control function is effective. MiFID II

[4] Hereafter MiFID II

[5] Hereafter MiFID II Delegated Regulation

[6] Management body refers to an institution's body or bodies, which are appointed in accordance with national law, which are empowered to set the institution's strategy, objectives and overall direction, and which oversee and monitor management decision-making, and include the persons who effectively direct the business of the institution (EBA, 2019). Hereafter referred to as the board.

makes this explicit, by requiring established procedures for direct communication lines between the compliance function and the board. Article 22(2)(c) sets out that the chief compliance officer[7] shall report to the management body on at least an annual basis, on the implementation and effectiveness of the overall control environment for investments services and activities, and on the risks that have been identified. Article 22(3)(c) also demands ad-hoc reporting when significant risks of failure by the firm to comply with its obligations under MiFID II are identified.

Lastly, to enable the compliance function to discharge its responsibilities properly and independently (whereas the latter is one of the elementary requirements to the compliance function), Article 22(3) sets out that firms should ensure specific conditions to be satisfied. These involve that relevant persons involved in the compliance function are not involved in the performance of services or activities they monitor, and that remuneration of such persons does not compromise their objectivity.

It should also be noted that the requirements set for the compliance function can be relaxed if the firm can demonstrate that in view of the nature, scale, and complexity of its business, and the nature and range of investment services and activities, the requirements are not proportionate and that its compliance function continues to be effective (FSA Norway, 2015, p. 9). This is known as the proportionality principle[8].

2.2.2 Guidelines and circulars

Level 3 rules, like common guidelines and recommendations set out by the different securities market regulators, have approximately the same position as circulars in Norway. In the following, EMSAs guidelines on certain aspects of the MiFID II compliance function requirements and circular 5/2015 from the Norwegian financial authority[9] on the same topic are presented.

According to ESMA, the guidelines are meant to provide additional clarifications on certain topics of the MiFID II compliance function requirements (ESMA, 2020a). In accordance with the focus of this paper, the guidelines are addressed to investment firms providing investment services. ESMA provides12 guidelines, divided into three main categories. Namely:

[7] Hereafter, the CCO. Also referred to as Head of Compliance (HOC).
[8] In deciding on the proportionality with regard to the effectiveness of the compliance function firms can look to ESMA Guideline no. 9 for more specific criteria to consider.
[9] Hereafter referred to as The FSA

1. Responsibilities of the compliance function
2. Organizational requirements of the compliance function
3. Competent authority review of the compliance function

In the following, category 1 and 2 will be in focus, as these are more aimed at elements important for firms in organizing an effective compliance function. This also coincides with the focus of FSA's circular being to provide investment firms with guidance on how they should align themselves to ensure that the law's requirements for an effective compliance function are met (FSA Norway, 2015, p.3).

Responsibilities of the compliance function

The tasks of the compliance function are related to monitoring the firm's compliance with rules and regulations, perform regular assessments of established routines and guidelines, and give preventive advice and provide guidance on the firm's obligations related to the legal framework that regulates their industry (FSA Norway, 2015, p 7). Towards these tasks, the compliance function must have a risk-based approach (ESMA, 2020).

Following up on Article 22(2) of the MiFID II Delegated Regulation, ESMA guidelines emphasize that a monitoring program – which The FSA refers to as a compliance plan – shall determine the function's priorities and the focus of the monitoring, advisory and assistance activities, and resources allocated to each[10].

The compliance plan shall be based on the compliance risk assessment (FSA Norway, 2015, p.7). Therefore, as the guidelines articulate, the risks identified in the assessment should be reviewed on a regular (and ad-hoc) basis, so that the program is always updated and ensures the objectives, focus, and scope – as well as the validity - of the planned compliance initiatives (p. 27). For this to be possible, both ESMA and The FSA find it important that the risk assessment takes into consideration all areas of the investment firm's investment services, activities, and any relevant ancillary services. The guidelines also stress that the risk assessment should be based on both the applicable obligations under MiFID II as well as national implementing rules, policies, and procedures implemented within the firm in the area of investment services and activities.

[10] Resources refers both the number of compliance employees, their skills and qualifications, IT resources and financial resources (FSA Norway, 2015)

As understood from MiFID II Delegated Regulation, the compliance plan work as a tool for evaluating whether the firm's business is conducted in compliance with regulatory obligations. As such, the ESMA guidelines clarify that the program also shall enable the evaluation of whether internal policies and procedures, organization, and control measures remain effective and appropriate to ensure that compliance risk is comprehensively monitored (p. 28). If the result of any monitoring activities shows that there is a risk for violating rules and regulations, these results should be taken into account in the ad-hoc revision of the firm's risk assessment (MiFID II Delegated Regulation, p.14).

Guidance on appropriate tools and methodologies for the compliance function to use in its monitoring activities are also available in ESMA's guidelines. Among other examples, ESMA suggests using technology for aggregated risk measures and exceptions logs[11] and targeted trade surveillance (p.8).

According to guideline 3(28), compliance's monitoring activity should inform in general on the adequacy and effectiveness of firms' policies and procedures, as well as relevant changes in applicable requirements. This involves the manner of monitoring and reviewing activities, relevant findings, and actions taken to address significant risk of failure of the firm to comply with obligations under MiFID II (p.30).

2.2.3 Organizational requirements of the compliance function

Cf. Article 22(3)(a) of MiFID II Delegated Regulation, the compliance function must have the necessary authority, resources, expertise, and access to all relevant information to work effectively. As with all other requirements that by law applies to the compliance function, the organizational ones should also be based on the proportionality principle.

ESMA's guideline no. 5 deals specifically with the effectiveness of the compliance function, and hence provide guidelines complementing Article 22(3) of the MiFID II Delegated Regulation.

Paragraph 44 says that to ensure that appropriate resources are allocated to the compliance function, senior management should regularly monitor whether the number of staff and their expertise is still proportionate to the scale and types of investment services, activities, and ancillary services of the firm. Also, budgeting for the compliance function should be

[11] Documenting material deviations between actual occurrences and expectations (ESMA guidelines, p.28).

consistent with the level of compliance risk the firm is exposed to and should be decided on in collaboration with the CCO (ESMA, 2020b, p. 34).

In addition to human resources, guideline no. 5 says that sufficient IT resources should be allocated to the compliance function. This relates to ensuring that the compliance staff has access to the relevant information for their tasks at all times. For this purpose, access to all relevant databases and records such as recordings of telephone conversations and electronic communications are relevant IT resources (ESMA, 2020b, p. 34, paragraphs 46-47).

To demonstrate the necessary level of knowledge and/or experience, different options may be foreseen at national level in the Member State concerned (ESMA, 2020b, p. 35). For the CCO, the requirement for professional qualifications means that the person concerned must have in-depth knowledge of the regulations to which the company is subject. This, including circulars and prepared practices from the supervisory authority. Other compliance employees must know this framework and should be regularly trained in order to maintain their knowledge (ESMA, 2020; FSA Norway, 2015). The compliance function must also have specific knowledge of the company's various business areas. For Norwegian investment firms, the responsibility for the assessment of the CCO's qualification - and its appointment - lies with the firm's board (Bahr, 2020, p. 20; FSA Norway, 2015, p. 3).

Lastly, to grant the compliance function the authority required for performing its duties, the firm's senior management should support the function in the exercise of its duties[12]. ESMA's guideline no. 6 suggests that this may be enhanced by the firm's compliance policy explicitly acknowledging the specific authority of the compliance function. MiFID II Delegated Regulation also holds that the compliance function should perform its activities permanently. What is meant by the compliance function being permanent is that it must be arranged for competent persons to take over the functions of the person who usually performs the tasks, in the event of planned or unforeseen absences (Bahr, 2020, p.20). Here the guidelines extend the notion of permanence to also entail regular monitoring as planned in the compliance plan, and not only control under specific circumstances (p. 36). Again – explicit and understood compliance policies and processes are important.

[12] Tone at the top.

3 Methodology

"Methodology is the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes" (Crotty, 1998, p. 3).

This master's thesis is conducted as a research-based project consisting of certain project objectives to be met and research questions to be answered. To do so, however, a clear plan of action must be evident – and hence, decisions upon the methodology of the research project must be made.

This chapter will provide detailed information on the methodology used in this thesis, allowing the reader to critically evaluate the overall validity and reliability of the study.

3.1 Research methods

According to Bryman et al. (2019), business research and its associated methods do not exist in a vacuum. Firstly, it is informed and influenced by existing theory and knowledge, which it also contributes to, as it feeds into the stock of knowledge to which the theory relates. Second, assumptions about the nature of social phenomena influence the research process. These ontological considerations should determine *what* one wishes to understand through research and further inform how we research it. The latter relates to assumptions known as epistemological considerations and focuses on how the social world should be studied (p. 25-31).

Before the following subchapters elaborate on the methods used to attain the objectives of this research project, the context of the research methods will be explained.

In conducting research, data is collected and analyzed in order to generate knowledge. The most common view of the relationship between theory and research is associated with a deductive approach where theory is tested through observations and findings. With an inductive approach, the connection is reversed and theory is the outcome of the research (Bryman et al., 2019, p. 23). For this particular research project, an inductive approach is used for data collection and analysis to develop a maturity model for the compliance function and further test this to evaluate the model for use as an improvement framework. However, rising from the criticism of the inductive approach that no amount of empirical data will necessarily enable theory-building, an abductive approach is also considered (Bryman et al., 2019, p.24).

This involves back-and-forth engagement with the social world as an empirical source for theoretical ideas, and with the literature, in a process of "dialectical shuttling" (Atkinson et al. 2003; Schwartz-Shea and Yanow 2012, in Bryman et al. 2019). This approach is viewed as especially helpful in choosing the "best" explanation from the competing explanations or interpretation of the data used in developing, for example, a compliance function maturity model.

In conducting research like this, meanings are assigned to the phenomena studied, and it is this assignment of meaning which constitutes the reality of the objective studied (Bryman et al., 2019, p. 27). For example, when describing the term "compliance" in terms of various characteristics such as specific structures, roles, etc., this makes such functions real in the sense that it is understood as a legitimate category of corporate functions. This point, also showed to by Alvesson and Thompson (2005), in Gay & Gay (2005), illustrates how the researcher always presents a specific version of social reality rather than one that can be regarded as definitive. And as such, knowledge can be argued to be indeterminate and to some degree subjective.

The concept of compliance initiatives, in my opinion, is an emergent reality in a continuous state of construction and reconstruction (Bryman et al., 2019). What I mean about this is not that it is not a pre-existing object – cause in all simplicity it is easy to view it as a social order excreting pressure on individuals to conform to certain requirements. This even lies in the word itself, in its verb form "to comply". People apply to the rules and follow standardized procedures as informed by the compliance initiatives – but from my view, the phenomenon of compliance is made real by the actions and understandings of the practitioners and researchers in the financial services sector.

Viewing realty as constituted by human action and meaning-making, rather than existing objectively and externally, the research must reflect the distinctiveness of humans as against the natural order (Bryman et al., 2019, p. 31). For this, the research strategy that respects the differences between people and the objects of the natural sciences is required and the researcher should grasp the subjective meaning of social action. Therefore, preoccupying myself with formal objective properties of compliance initiatives neglects the degree to which the concept is accomplished through everyday interaction. New problems need to be solved, new solutions appear, and the understandings of how the initiatives should work are adapted to this. Being concerned with how the compliance function can grow mature and generate benefits to firms through functioning as effectively as possible, this project will aim to

understand the phenomena of compliance and the processes whereby it works and develop a model for this purpose.

The next subchapters will dig deeper into the research methods used to accomplish this.

3.2 Literature study

How can the effectiveness of the compliance function within Norwegian investment firms be evaluated using a maturity model?

This research question reflects the main objective of this research project. Namely, to develop a model for assessing the maturity of compliance functions within Norwegian investment firms. To enable this, however, knowledge on how to develop such a model is required.

Snyder (2019) argues that for many research questions, a literature review may be the best methodological tool (p.334). She does so by referring to Webster and Watson (2002), who states that an effective and well-documented review as a research method creates a firm foundation for advancing knowledge and facilitating theory development. She also emphasizes that by integrating findings and perspectives from many empirical findings, a literature review can address research questions with a power that no single study has (p. 333).

However, there are different types of review methodologies. The most common distinction found in the methodological literature is between a systematic and narrative approach (Bryman et al., 2019). The latter is less focused and more wide-ranging in scope. In contrast, the first is about adopting explicit, often more quantitative, procedures to generate unbiased and comprehensive accounts of literature in a research field (Mays et al., 2005, in Bryman et al., 2019). In addition to these, Snyder (2019) also addresses what she refers to as integrative approaches. These are closely related to the semi-structured (narrative) review approach, but in comparison to those, the integrative review usually has a different purpose (p.335). Namely, to review, critique, and synthesizes representative literature on a topic in an integrated way so that new frameworks and perspectives on the topic are generated (Torraco, 2016, p. 356). Which approach to rely on however depends on the purpose of the study and the research question targeted.

In order to establish a reasonable catalog of requirements for the design of maturity models, exploring collective evidence from that research area will be useful. This, to attain a foundation for - and understanding of – the decisions that must be made when one is to

develop such a model. For this purpose, a semi-systematic - or narrative - approach is considered appropriate.

In general, the reasoning behind this is that the semi-systematic review approach is designed for topics that have been conceptualized differently and studied by various groups of researchers within diverse disciplines (Wong et al., 2013). The application areas of maturity models are widespread and range from cognitive science to business applications and engineering (Kohlegger, 2009, p. 51). And as such, research on the act of developing them is also conducted by researchers within the same wide range of disciplines. Hence, in deciding on a narrative approach for this literature study, whether the approach would help summarize and evaluate a vast research field was considered. For that purpose, a strict systematic review was thought of as too limiting.

As opposed to the fact that the systematic approach may limit the scope of the review by having pre-specified inclusion criteria to answer a particular research question or hypothesis (Snyder, 2019, p. 335), the semi-systematic approach seeks to identify and understand all potentially relevant research traditions that have implications for the studied topic (Green et al., 2006; Wong et al., 2013).

However, while covering broad topics and different types of studies, the narrative approach holds that the research process should be transparent and have a developed research strategy that enables readers to assess whether the arguments for the judgments made were reasonable, both for the chosen topic and from a methodological perspective (Snyder, 2019, p. 335). This, to meet the criticism of narrative reviews lacking synthesis and rigor (Byrne, 2016). As such, the following subchapter will elaborate on the process by which the literature study for this research project is conducted.

3.2.1 Methodological strategy

Following Demiris et al. (2019), the narrative approach decided on for this project follows a four-stage review process. This involves conducting a search, identifying keywords, reviewing abstracts and articles, and lastly to document the results (See Figure 2). Maier et al. (2012) followed a similar process in selecting their review sample for their paper on stages-of-growth modeling.

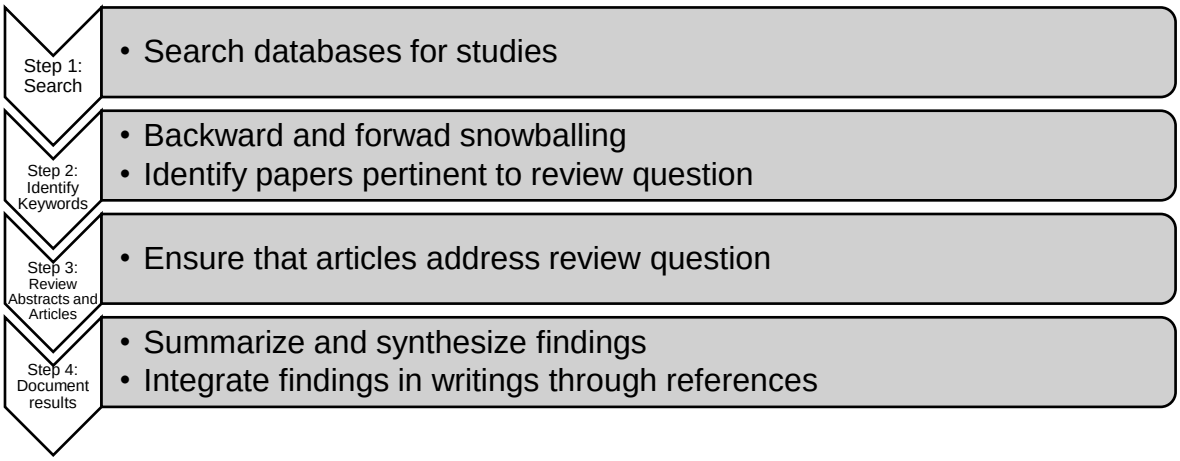


Figure 2: The narrative literature review process (Demiris et al., 2019).

Step 1: Conduct a Search

The first step includes the researcher searching for studies that describe the problem of interest in a variety of databases in which scientific literature is indexed. Here, it was important for me to use more than one database to ensure the identification of the majority of relevant literature. The databases used were those recommended by the university library[13] for students researching topics in economics and management. Among others, Business Source Elite (EBSCO), Emerald Management Plus, Jstor, SpringerLink, and Wiley Online Library were used.

Step 2: Identify keywords

Next, when the initial search for relevant literature is done, Demiris et al. (2019) call for the identification of relevant keywords in that literature to extend the search and find individual studies on similar topics. In search for additional literature for the current study, also synonyms for the identified keywords were used. See examples in Table 1.

Keyword 1	**Keyword 2**
Maturity model	"Designing ….", "Modelling process of…", "Stages-of-growth models", "Stages-of-growth modeling", "principles"
Design science	"..in relation to maturity models", "guidelines in …."

Table 1: Key words used in the literature search.

[13] University of South-Eastern Norway

Step 3: Review abstracts and articles

As soon as the search is complete, and one is left with a handful of relevant articles, reviewing the abstracts of these will ensure that they actually address the topic of interest (Demiris et al., 2019).

Step 4: Document results

The last step of the literature review process includes synthesizing and summarizing the findings from the chosen articles. For a narrative review, no rules are stating that the literature search must be documented other than through references in the study (Demiris et al, 2019). However, for the sake of transparency,

Table 2 in chapter 5 on the modeling process provides an overview of the articles considered most important for further use in this project.

3.3 Case study

What is the state of the compliance function within the selected case firm as of today, and how can the function possibly be improved to be more efficient?

Yin (2018) recommends doing a case study when one wants to understand a real-world case and assumes that such an understanding is likely to involve important contextual conditions pertinent to the case (p.15). More closely case studies can be defined as:

"analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame—an object—within which the study is conducted and which the case illuminates and explicates" (Thomas, 2011, p. 513)

From this definition, Thomas (2011) adopts a classification typology of case studies consisting of six aspects considered important for differentiating between the various types of case studies to be applied in a research project (See Figure 3). In the following, the case study to be conducted in this research project will be classified accordingly.

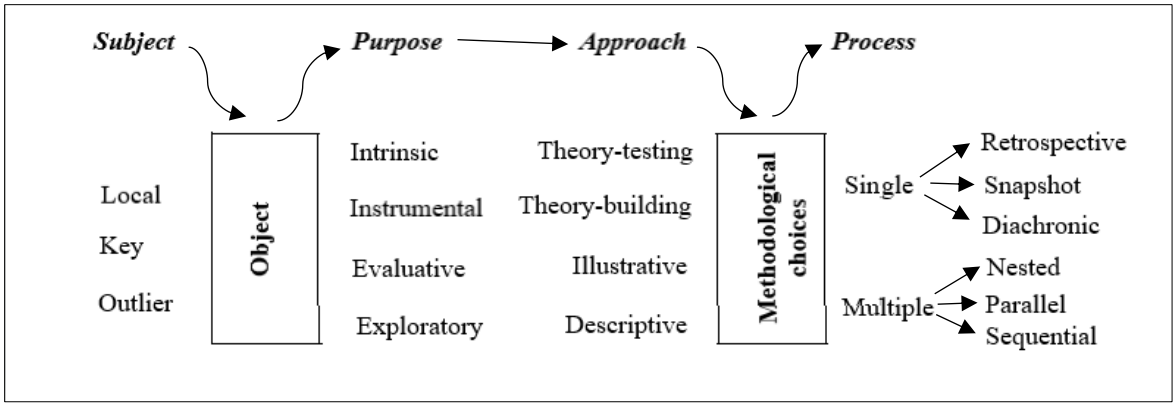


Figure 3: A typology of case studies (Thomas, 2011, p. 518).

From the above definition, it becomes evident that a case study must comprise two elements: namely, a *subject* and an *object*. Here, Thomas (2011) stresses that the subject is not a sample representative of a wider population. Rather, it shall be selected because it is an interesting or unusual, or revealing example through which the lineaments of the object can be refracted (p.514). This implies that the essence of subject selection rests on the dynamic of the relation between subject and object.

The subject in focus in the current case study is a Norwegian investment firm which was selected because it offers what can be referred to as "exemplary knowledge" (Thomas 2010, in Thomas, 2011). This means that it is chosen based on its capacity to exemplify the analytical object of the inquiry – which in this case is to test the maturity model developed throughout the first part of the research project.

The *purpose* of the study is intimately connected to the object (Thomas, 2011, p.516). I.e., the understanding that is required – or explanation needed – will be related to the reason for doing the study. In the current study, the purpose is twofold. First, testing the model in practice will provide implications as to whether it is compatible in a real-life situation. Second, it will enable the evaluation of the case firm's compliance function "as-is" and further contribute with guidelines for its improvement.

Thomas (2011) refers to researchers such as Stake (1995), Merriam (1988), and Bassey (1999) when introducing the terms "intrinsic", "instrumental", "evaluative", and "exploratory" for describing the purposes of case studies. The beforementioned purpose of testing the model is not based upon interest for a particular case – i.e., an intrinsic interest in the case firm itself. Rather, the interest lies in figuring out how the model functions in practice. Testing the model within the particular case firm is as such done to provide insight

into that research problem on a general basis, and not for the sake of learning about that particular firm (Stake, 1995, p. 3). In other words, the first purpose can be labeled instrumental. For the next purpose, however, the case firm is studied in depth with "the purpose of providing decision-makers within the firm with information that will help them to judge the merit and worth of policies, programmers or institutions". This definition is formulated by Stenhouse (1985) to describe evaluative case studies (Bassey, 1999, p. 4). Hence, the second purpose of this case study can be thought of as evaluative.

Following the typology of Thomas (2011) further, the next consideration regards the approach adopted. Reflecting the broad nature of the object and the purpose of the study, the significance of theory in the conduct of the study is at this point enlightened (p.516). As stated by Bassey (1999), instrumental research falls into a category in which inquiry is carried out to understand (p. 40). As such, a theory-seeking/testing approach is considered appropriate. For the evaluative purpose, on the other hand, the inquiry is carried out to understand and to evaluate (p.41). Hence, it will also have a descriptive approach.

From the above discussion of approaches, decisions on the methods to be applied in the case study must be made. Such decisions concerns what Yin (2018) refers to as the research design. More closely defined as the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions (p.26). According to Savin-Baden and Major (2012, p. 152), this regards decisions on data collection and analysis. To accomplish the objective and associated purposes of this case study, I regard the qualitative approach and use of interviews as appropriate.

Case study interviews typically resemble guided conversations rather than structured queries (Yin, 2018). This means that although a consistent line of inquiry exists, the actual stream of questions in a case study interview is likely to be fluid rather than rigid (Rubin & Rubin, 2011, in Yin 2018). As such, case study interviews are ideal when the researcher wishes to follow up initial responses by probing for additional information that can help clarify or illuminate (Savin-Baden & Major, 2012, p.358).

This approach has helped inform the current case study. Relying on an interview protocol covering topics of interest in a particular order has ensured the collection of information important to cover both the instrumental and evaluative purpose of the study (See Appendix 2). Nevertheless, being able to stray from the interview protocol from time to time and include additional questions in response to participant comments and reactions have enabled a deeper

understanding - both for the maturity assessment of the case firm's compliance function and to the applicability of the model in practice. Savin-Baden and Major's (2012) statement that "interviews are appropriate when a researcher wants to take advantage of the one-to-one communication form in order to probe deeply into a participant's experiences" (p. 358) supports the latter.

For the last considerations to be made in regard to Thomas' (2011) classification typology, we look to the subject chosen. Here, this is the case firm. To decide on the operational processes of the study, it is important to consider whether there should be a comparative element to it (Stake, 2005, in Thomas, 2011, p. 516). This refers to the single/multiple case distinction, which Yin (2018) presents as a choice between four different case study designs. Here, every type of design includes a desire to analyze contextual conditions in relation to the "case" and the primary distinction lies in choosing between a single- and multiple-case study.

In the first section of this chapter, it was stated that the choice of subject was decided on based on its "exemplary-knowledge". As the case study is focused on the maturity model, the theory on which it is based specifies a clear set of circumstances under which the determining factors of the model are believed to be true. Here, these circumstances will apply to the compliance function within Norwegian investment firms. Hence, it is believed that choosing a holistic single-case – a compliance function within a Norwegian investment firm - can represent a significant contribution to knowledge and theory building (Yin, 2018, p.49) in the research question posed.

The choice between single and multiple case studies further determines the boundary and shape of the study. Single-case studies like the one conducted for this research project's purpose often come in one out of three forms, wherein personal or systemic features of the subject are bounded by some time aspect (Becker, 1992, in Thomas, 2011). Based on a comprehensive literature review of different case studies, Thomas (2011) presents these three forms as retrospective, snapshot, and diachronic studies (p.517).

To test the model and assess the maturity of the compliance function within the case firm it is relevant to look into how the compliance function is organized as of today. This involves the collection of data on how the case firm satisfies specific requirements for arriving at different maturity levels. As the interview is aimed at collecting data to draw conclusions on this, questions regarding existing procedures and processes will be relevant. To complete Thomas's (2011) typology, this process falls into the category labeled "retrospective". The

reason is that it is the “as-is” situation of the firm that is of interest, and not to show change over time (diachronic) or to analyze the collected evidence aided by a temporal juxtaposition of events (snapshot) (Thomas, 2011, p. 517).

3.4 Research quality

Lincoln and Guba (1985) propose trustworthiness as a criterion of evaluation in qualitative studies and describe four aspects to be considered. These are listed in Bryman et al (2019) as *credibility, transferability, dependability*, and *confirmability* - and will in the following be used in the evaluation of quality for this research project.

Credibility pertains to how believable the findings of the study are, and the implementation of the credibility criterion is a twofold task. In this lie, firstly, to carry out the inquiry in such a way that the probability that the findings will be found to be credible is enhanced and, second, to demonstrate the credibility of the findings by having them approved by the constructors of the realities being studied (e.g., the interviewee) (Lincoln & Guba, 1985, p. 296).

To increase the probability that credible findings were produced, this research project was conducted according to the canons of good practice (Bryman et al., 2019). Testing the developed model in a case study helps to ensure that the results obtained through the literature study are not biased. Although they cannot be validated with the same scientific rigor as if the model were applied in a formal experiment, it can at least provide implications on their relevance. Further, member checking, whereas the interviewee provided feedback on the findings served several purposes. For example, allowing the interviewee to correct errors of fact and challenge what was perceived to be wrong interpretations of the data, has strengthened the truth-value of the findings (Noble & Smith, 2015). What lies behind the decision to use member checking is the recognition that multiple realities exist. Having the interviewee assess the overall adequacy and confirm the information in which the data constitutes, mitigates the chance of false reporting or misinterpretations of the information due to the researcher’s own experiences and viewpoints being biased.

Similar to the concept of external validity in quantitative research, *transferability* is about the extent to which the study findings can be transferred to other contexts or groups (Lincoln & Guba, 1985). However, this concept differs from that used in quantitative research in that it is the reader who must determine the degree of transferability to other contexts. To make this

possible, the researcher must provide sufficient information about the context of the study. I.e., thick descriptions should be provided (Lincoln & Guba, 1985, p. 359).

In connection with Part B of this research project, which constitutes a case study, the need for rich descriptions had to be weighed in relation to the informant's need for anonymity (Morse, 2008). That the compliance function is an important function for firms' earnings (this, in the form, that it is both vulnerable in connection with the risks and consequences that comes with the poor organization of it, and that it can create a basis for competitive advantage - see Antonsen, 2020), has meant that the demographic description of the case company and quotes from the interviewee's statements are anonymized.

According to Yin (2018), the most desirable option is for a case study to disclose the identities of both the case and the individual informants (p. 239). Among other reasons, because disclosure provides the reader with the opportunity to recollect any other previous information he or she may have learned about the case from other sources in reading and interpreting the current case study. In other words, anonymization may eliminate some important background information – and can therefore be viewed as a limitation. However, the case firm was chosen for it to portray an "ideal type" (Yin, 2018, p. 239), and therefore it is seen as justifiable not to disclose any such information that could lead to recognition.

The assumptions underlying the CFMM and the context of the study, on the other hand, have been described in such detail that the findings may be transferred to other cases nationally. The requirements for the organization of the compliance function within investment firms in Norway are mostly the same. Therefore, rich information on both the choices made for the structure of the CFMM and the organization of the compliance function within the selected case firm is seen as strengthening the study's transferability to other Norwegian investment firms.

The third criterion, *dependability*, parallel with the quantitative research criteria reliability. I.e., it questions whether the findings are likely to apply at other times (Bryman et al., 2019, p. 48). To achieve dependability, researchers can ensure the research process is logical, traceable, and clearly documented (Tobin & Begley, 2004 in Nowell et al., 2017, p. 3).

Throughout the current research process, there has been a focus on accurate data processing. However, the possibilities that the findings from both the literature study and the case study could be repeated, if the studies were repeated, are limited. The limitations include that neither the topic (maturity models for the compliance function within investment firms) nor

the actors (the firm, its Head of Compliance, and external regulations) are static over time. Also, that the researcher's role and own perception of reality is important for how data is collected, interpreted, and analyzed might be a limiting factor.

However, by reporting how the research process has proceeded and what assessments have formed the basis for choices made along the way, the reader can assess the dependability of the study.

Lastly, the criteria of confirmability concern objectivity (Bryman et al., 2019, p. 48). According to Lincoln and Guba (1989), confirmability is first established when the criteria of credibility, transferability, and dependability are met (Nowell et al., 2017, p. 3). In the above discussion on those three criteria, there has been shown to different “markers” throughout the study that are meant to substantiate the readers' understanding of why and how different choices related to the use of theory and research methods made. For example, it is referred to the use of thick descriptions in presenting the context of the study, as this is considered important for transferability. It is also discussed how member checking was used as a technique to establish credibility. Arguably, this can be seen as part of providing a rationale for the decisions made during the research project.

Further, how researcher subjectivity might have influenced choices when it comes to data collection and analysis is elucidated in the discussions on choices made during the modeling process. This to show awareness that one’s position and background may influence the research process and consequently results.

3.5 Ethical considerations

According to Diener and Grandall (1978), discussions on ethics in business research tend to revolve around four main areas. Whether there is harm to participants, lack of informed consent, invasion of privacy, and lastly, whether deception is involved (Bryman et al., 2019, p. 114).

Harm to participants entails many facets. For this research project, harm to career prospects or future employment is considered to inhabit a risk of occurring for the participant. Since the interviewee will provide information on the organization of the firm, thoughts on its culture and structure – failing to anonymize its quotes could possibly harm the reputation of both the firm and the interviewee.

The financial industry in Norway is strictly regulated. Statements disclosing weaknesses in the organization of the compliance function could, for example, lead to an investigation by the FSA. In a worst-case scenario, this could harm the case firm both economically and in terms of its integrity. Also, since it is the interviewee who is in charge of the organization, such information could damage his/her reputation and chances in a future career.

As such, the issue of harm to participants is addressed in ethical codes by advocating care over maintain the confidentiality of records and the anonymity of accounts (Bryman et al., 2019, p. 115). For this purpose, this research project was requested approved by NSD (Norwegian center for research data) in advance of the data collection. As part of the application, an information and consent form were designed. This form, which also formed the basis for the approval from NSD, is the same as was signed by the participant (See Appendix 3).

Through the form, the participant was provided with sufficient information about the research project to make an informed and free decision on whether (s)he would participate in the study. The information was provided in written form and formulated to be comprehensible for the participant. This, as a measure to ensure that there was no explicit or implicit coercion and to prevent deception (Bryman et al., 2019).

For applications to be approved by NSD, it must be assured that data about people and society can be collected, stored, and shared, both safely and legally, today and in the future (NSD, n.d.). This aspect, concerning privacy, is also covered in the form in terms of it describing how the participant's privacy will be protected. First and foremost, it is declared that the information collected is treated confidentially and in accordance with the privacy regulations. Among other things, this includes the assurance that the information gathered is used for the purposes described in the information letter only and that the material will be stored as an encrypted file where names and other contact information will be replaced with codes. This, to ensure that no unauthorized person can obtain any personal information. It is also assured that study participants will not be recognizable in the publication and that the information is deleted when the project ends.

On behalf of the University of Southeast Norway, NSD has assessed that the processing of personal data in this project is in accordance with the privacy regulations.

3.6 Summary

Summarizing the above chapters on methodology, one can see how a strategy to answer the research questions and attain the research objectives has been formed.

RQ1 reflects the main objective of this research project. Namely, to develop a model for assessing the maturity of compliance functions within Norwegian investment firms. To do so, knowledge on how to develop such a model is important. And, to attain that, a narrative literature review is considered appropriate. The reason for choosing the narrative approach is that it enables the establishment of a reasonable catalog of requirements for the design of maturity models, before starting the actual process of developing a compliance function maturity model.

The narrative literature review can be viewed as the first of two parts involved in the strategy to attain the main objective. The second part is established by answering RQ2. Doing so involves testing the developed model in practice. By looking to Yin (2018) it was decided that this would be done using a case study method. This, assuming that understanding the case firm and its compliance function in terms of requirements in the model would involve important contextual conditions pertinent to the research.

The case study conducted in this research project was classified using Thomas' (2011) classification typology for case studies. Figure 4 summarizes this.

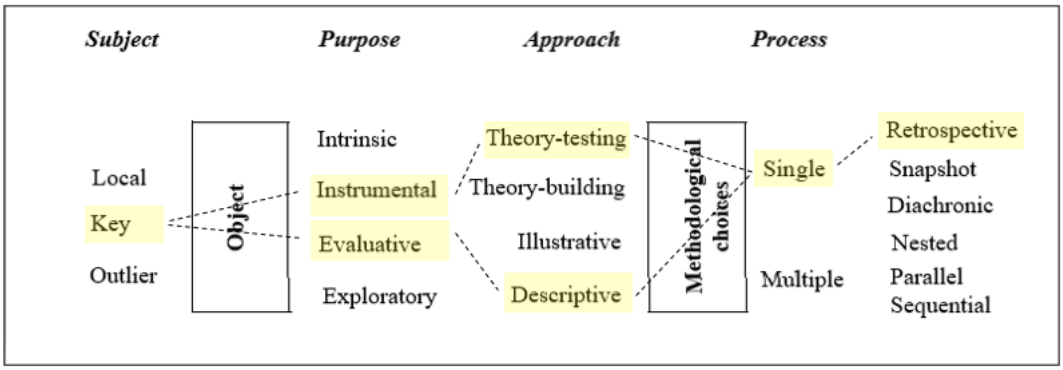


Figure 4: Case study classified using Thomas' (2011) typology.

In short, the focus of the study is the maturity model developed for the compliance function within Norwegian investment firms. The theory on which it is based specifies a clear set of circumstances under which important elements of the model are true. The case firm is chosen because of its capacity to exemplify these circumstances. Therefore, assessing the "as-is"

situation of the firm (ref. a retrospective case firm) is thought to provide valuable insight into the research problem.

Also, as RQ2 ask for the maturity of the compliance function within the firm to be assessed using the model - the case study will also provide decision-makers within the case firm with relevant information for enhancing their compliance function's effectiveness.

Part A – Developing a Compliance Function Maturity Model

4 Maturity models

Pullen (2007) defines a maturity model as *"a structured collection of elements that describes the characteristics of effective processes at different stages of development. It also suggests points of demarcation between stages and methods of transitioning from one stage to another"* (p.1318).

Maturity models – also referred to as stages-of-growth models – have been widely used in a vast array of domains to assess the maturity (i.e. competency, capability, level of sophistication) of a selected business process, function, program, or system (de Bruin et al., 2005; Poeppelbuss & Roeglinger, 2011; Solli-Sæther & Gottschalk, 2010, 2015). Working both as a means of assessment and as part of a framework for improvement, maturity models are developed to assist firms in deriving an informed approach for increasing the capability of a specific area within the organization (Fraser et al., 2002).

The idea that maturity models can be used as an improvement framework, according to Solli-Sæther & Gottschalk (2015), is based on the underlying assumption that predictable patterns (in terms of stages) exist in the maturity/growth process in all parts of an organization. From this, the core concept of maturity models is based on these stages being (1) sequential in nature, (2) occurring as a hierarchical progression that is not easily reversed, and (3) involve a broad range of organizational activities and structures (p.90).

4.1 Purpose

From the above description of maturity models, we understand that in practice, these are used as roadmaps guiding firms in search for improvement. For such application, maturity models must be capable of serving more than one purpose (Poeppelbuss & Roeglinger, 2011). Rosemann and de Bruin (2005) call for both diagnosing the "as-is" and guiding towards the "to-be" of the process, function, or system to be improved.

Becker et al., (2009) elaborate on the as-is assessment, which Poeppelbuss and Roeglinger (2011, p. 4) refer to as part of the *descriptive purpose* of maturity models. Here, the current domain under investigation is assessed with respect to given criteria and characteristics and

evaluated to identify its maturity level (Becker et al., 2009). Rummler and Brache (1990) used the metaphor of making a diagnosis to describe this process.

If we use Rummler's (1990) metaphor that a diagnosis has been made, the next purpose of the maturity model should be *prescriptive*. Just as a doctor would give his patient prescriptions on how to get well, the maturity model should give the firm guidelines for how to move forward to reach the next stage of growth. In the words of Moultrie (2009) "specific and detailed courses of action are suggested for each maturity level of a process area" (p.150).

The last purpose suggested by Poeppelbuss and Roeglinger (2011) is a *comparative* one. This coincides with Batenburg et al. (2014) using maturity models to codify what might be regarded as good practice and bad practice. This can be done because the models can be designed to allow for both internal and external benchmarking. De Bruin et al. (2005) emphasize how external benchmarking helps compare similar practices across organizations (p.4). This, given sufficient data from a vast array of assessment participants is available when the model is developed.

4.2 Criticism

Although their use is widespread – the underlying concept of maturity models is frequently subject to criticism. Teo and King (1997) are among the researchers who are skeptical towards the simplicity of the typical evolutionary maturity model. They point to the "simplistic deterministic nature of such models" (p. 189) and claims that it limits the potential for explaining complex organizational phenomenon. Holding the contingency perspective, they emphasize that there are no predictable patterns, but rather multiple advantageous pathways of growth. Lasrado et al (2015) highlight this criticism in their paper and show a lack of theoretical foundations with developers adopting the CMM as their structure[14] and not conceptually grounding the structure from literature (p.6).

This concern that there is no inevitable linear sequence of stages in organizational life is strengthened by the lack of empirical foundation proving the opposite (Benbasat et al., 1984). That the core concept of maturity models is hard to prove empirically is another aspect of the criticism that is being directed at maturity models. For example, Becker et al. (2010) point to a lack of operationalizing maturity measurement, and Solli-Sæther and Gottschalk (2010)

[14] Number of maturity levels, dimensions, etc.

state that the research related to stages of growth has to a large extent been conceptual while the debate over the existence of stages itself has suffered from a lack of empirical evidence.

Besides discussing how researchers for decades have struggled to meet this criticism, Solli-Sæther & Gottschalk (2010) also aim to develop maturity models that are both theoretically founded and empirically validated. They present and tests a modeling procedure that might be capable of doing so. In the next chapter, on the modeling process of maturity models, their research is addressed alongside other research on the same topic.

5 Modeling process

5.1 Literature review on the modeling process

This chapter addresses research on the modeling process of maturity models. The research presented is retrieved from a comprehensive literature review on the field of maturity and growth modeling, covering different business management journals and articles that have the term “maturity models” or “stages-of-growth” as keywords or in their title. Specifics on the method used in the literature review were elaborated on in chapter 3, on methodology.

In order to establish a reasonable catalog of requirements for the design of maturity models, many researchers (e.g. Batenburg et al., 2014; Becker et al., 2009; Maier et al., 2012; Mettler, 2011) have taken a design science research perspective. With regards to the modeling process of maturity models, the design science perspective involves the understanding of maturity models as artifacts serving to solve problems (March & Smith, 1995) in determining the status quo of a firm’s capabilities and deriving measures for improvement therefrom (ref. the descriptive and prescriptive purpose of a maturity model).

As for the process of maturity model design, research differs in how different artifacts (constructs, models, methods, and instantiations) are deployed to develop frameworks for the modeling process. For example, the current literature review reveals differences in the number of phases of the procedure. Becker et al. (2009) suggest a procedure model consisting of eight phases for the “theoretically founded development and evaluation of maturity models” (p. 217; 221). This by relying on seven guidelines for design science defined by Hevner et al. (2004). De Bruin et al. (2005) propose a framework consisting of six generic phases, and Solli-Sæther and Gottschalk (2010) and Maier et al. (2012) propose five phases. See overview in Table 2.

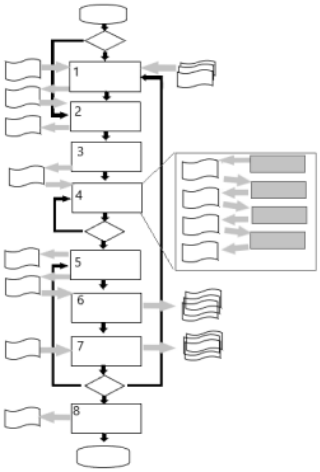
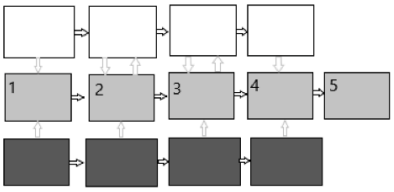
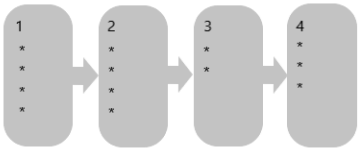
Research article	Phases	Frameworks conceptualized
(Becker et al., 2009)	1) Problem definition 2) Comparison of existing maturity models 3) Determination of development strategy 4) Iterative maturity model development 5) Conception of transfer and evaluation 6) Implementation of transfer media 7) Evaluation 8) Rejection of maturity model	
(de Bruin et al., 2005)	1) Scope 2) Design 3) Populate 4) Test 5) Deploy 6) Maintain	
(Solli-Sæther & Gottschalk, 2010)	1) Suggested Stage Model 2) Conceptual Stage Model 3) Theoretical Stage Model 4) Empirical Stage Model 5) Revised Stage Model	
(A. M. Maier et al., 2012)	1) Planning 2) Development 3) Evaluation 4) Maintenance	

Table 2: Overview of development frameworks reviewed

However, what is evident is that although they differ in the number of phases suggested, the different frameworks all hold a process that in itself is evolutionary. This, as each phase offers new challenges as soon as the challenges of the prior phase, are solved (Solli-Sæther & Gottschalk, 2015, p. 90). Solli-Sæther and Gottschalk (2010), for example, refer to their stage-of-growth modeling process as a goal-oriented procedure (p.7). What is meant by this is that

the maturity model changes its status from a suggested maturity model via a conceptual, theoretical, and empirical model, and finally to a revised maturity model. Such a notion will also cover the modeling process of de Bruin et al. (2005) as they describe the phases as "guiding the development of a model through first the descriptive phase, and then to enable the evolution of the model through both the prescriptive and comparative phases within a given domain" (p. 4). The order of the generic phases is as such important because decisions made in one phase will have implications for the next phase. However, all of the frameworks also encourage iterative progressions throughout its phases to improve theory building and empirical validation (Becker et al., 2009; de Bruin et al., 2005; A. M. Maier et al., 2012; Solli-Sæther & Gottschalk, 2010, 2015).

As another step to improve the lack of empirical validation, which holds a strong position in the critique against maturity models, Maier et al. (2012) take inspiration from Eisenhardt's (1989) roadmap for developing theory from case studies (p.145). This includes alerting the reader to the steps and associated decision points in the development journey. The use of case studies also becomes evident in Solli-Sæther and Gottschalk's (2010, 2015) framework. Here, in developing theory on the sequential nature of the stages are drawn from case studies.

5.2 Developing a Compliance Function Maturity Model

When developing a maturity model for the compliance function within Norwegian investment firms, I find it relevant to take notes from various phases as presented in Table 2. This, because many of the frameworks have shown to be evident also in practice (See for example Solli-Sæther & Gottschalk, 2015). Additionally, it will help ensure a well-structured and -documented modeling process.

To develop a foundation for (and an understanding of) the decisions that are made in the process of developing a Compliance Function Maturity Model[15], the first phase of this process will consist of some of the elements included in the planning (Maier et al., 2012), scoping (de Bruin et al., 2005), and problem defining (Becker et al., 2009) phases introduced in Table 2.

5.2.1 Phase 1: Planning

As with every other project, it is clever to start with problem definition before initiating the actual design process. According to Becker et al. (2009), problem definition includes

[15] Hereafter CFMM

determining both the targeted domain versus partial discipline and the target group (p.217). This is what de Bruin et al. (2005) refer to as the scope of the desired model. Determining the scope will set outer boundaries for model application and use and will thus impact the remaining phases of the process (p. 5). Table 3 reflects the major decisions to be addressed in the planning phase.

Criterion	**Characteristic**			
Focus of Model	Domain-Specific		General	
Development stakeholders	Academia	Practitioners	Government	Combination

Table 3: Decisions when scoping a Maturity Model, adapted from de Bruin et al. (2005, p.5)

In determining the focus of the model, one spells out which domain the maturity model will target and be applied to. Here, it is normal to divide between a domain-specific or general focus. I.e. whether the model is developed to assess and improve management in general, or in a particular discipline – say for example, the management in software development (de Bruin et al., 2005; A. M. Maier et al., 2012). With the initial focus of the model identified, stakeholders from academia, industry, non-profits, and government can be identified to assist in the development of the model (de Bruin et al., 2005, p.5).

Maier et al. (2012) suggest some additional decisions to be made in a planning phase – namely to (1) specify the audience, (2) define aim, and (3) define success criteria for the model. The term audience refers to all stakeholders who will participate in various aspects of the assessment (Maier et al., 2012, p. 149). To specify the audience is important for the design phase to come, because the design of the model should incorporate the needs of the intended audience and how these will be met (de Bruin et al., 2005). Defining aims are related to maturity models being seen as analytic strategies (Maier et al., 2012). Based on a comprehensive review of existing models, Maier et al. (2012) suggest two overarching aims or improvement paradigms. These are improvement through "raising awareness" and improvement through "benchmarking" across companies or industry sectors (p. 149). Here, benchmarking includes a comparison against an identified best practice example and making statements about the performance of a whole industry sector in terms of a certain process or capability. Raising awareness can be seen as a more analytic approach, where one aims for evidence to determine what improvements are needed and whether an improvement initiative has been successful. Benchmarking seems to incorporate "raising awareness," but not vice versa.

Finally, a definition of success criteria is suggested as a part of the planning phase. As these will be manifested in the form of high level or specific requirements for the design of the model, they become a basis for the evaluation of whether the development and application of the model were successful (Maier et al., 2012).

A plan for The CFMM

To effectively manage risk, firms must establish appropriate internal control to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance (Msib & Foster, 2019). Compliance objectives pertain to adherence to laws and regulations to which a firm is subject. Failing to do so may lead to legal or regulatory sanctions, financial loss, or loss of reputation (Singh, 2005). In the Norwegian financial market MiFID II, implemented by law in 2018, requires firms to implement a series of systems and controls aimed at securing an effective risk management process (ILA Norge, 2015). This includes policies and procedures to ensure regulatory compliance and the establishment of a permanent, independent, and *effective compliance function* (ESMA guidelines, p). However, adaptations and changes to ensure an effective compliance function cannot be made overnight. Therefore, the aim is to develop a maturity model for the compliance function within Norwegian investment firms, to be applied for raising awareness about the "as-is" situation for the firm using the model. The results can then be turned to making recommendations for where to go next to improve the effectiveness – or maturity – of the firm's compliance function. This means that the model, first and foremost, will have a descriptive and prescriptive purpose.

With the focus being domain-specific, it is important to gather information about the context, the idiosyncrasies, and terminology of the specific domain for the model to be understood by and be of relevance to the audience (A. M. Maier et al., 2012, p. 150). The audience of the CFMM can be thought of as "industry professionals". E.g., CEOs in charge of corporate planning or Chief Compliance Officers who wish to measure how their department is doing - and see what can be done better. For that reason, development stakeholders that might be helpful in that regard can be both academia and practitioners. For example, literature studies on the field will provide insight into the peculiarities of the phenomenon, and ideas from practice can further complement such information.

In general, the CFMM is meant to be used by and be useful for investment firms in the Norwegian financial market. Success criteria for usability, as such, shall pertain to the clarity of the language used and the architecture and rating scale of the model shall not be too

complex (either not too simple) for non-academics without prior knowledge of maturity models to apply. On the other hand, criteria for usefulness will revolve around whether the model shows out the be helpful – i.e., whether it triggers reflection and learning among its audience. This will be answered when testing the model together with its intended users (see Part B of this project).

5.2.2 Phase 2: Design

As soon as the scope of the model is set, it is time to determine a design or architecture for the model (de Bruin et al., 2005). Seemingly all of the process development frameworks reviewed for this project emphasize the importance of a comprehensive comparison of existing maturity models as a foundation for the design phase. This, because shortcomings in existing models can motivate modifications for enhancement, structures or design ideas can be transferred, or content from one domain can be found interesting to apply to another domain (Becker et al., 2009; Solli-Sæther & Gottschalk, 2010).

However, it is not only the existing literature on maturity models one should have a good overview of. In designing a maturity model, decisions about the process areas to be assessed, the maturity levels to be assigned, and its related cell descriptions (Maier et al., 2012, p.150) call for references to an established body of knowledge on the field in which the maturity model is to be applied. This is elaborated on by Solli-Sæther and Gottschalk (2010, 2015) as they describe what ought to be done in phase one of their modeling process referred to as developing the suggested stage model. In their framework (2010), they make a distinction between theoretical and empirical work related to the five phases. The theoretical work of phase one, which is of most relevance to this project, includes a thorough literature review on the field in which the model is to be applied to get indications on the theoretical concepts and definitions that will be of importance when defining maturity levels and descriptions (Solli-Sæther & Gottschalk, 2015, p. 90).

In the sections below, I will address three important building blocks, that are important in the design phase according to existing frameworks and research. As for this thesis, the design process is meant to result in a “first draft” of a maturity model for the compliance function. Therefore, theory on compliance will be discussed on the basis of these building blocks. Theory and knowledge on the compliance function in investment firms are retrieved from an extensive literature review connected with preparatory work for this thesis in the autumn of 2020. Ideas from practice are also considered through reviewing and comparing existing

maturity models developed by practitioners to be applied in the same - or similar – domains. See Appendix 1 for further details on these.

Process areas

Within existing maturity models a common design principle is to represent maturity as a number of cumulative stages where higher stages build on the requirements of lower stages (de Bruin et al., 2005; Rosemann & de Bruin, 2005). How many stages there are may vary from one model to another, but there is a general agreement among researchers and practitioners that the stages need to be distinct, well-defined, and need to show a logical progression (de Bruin et al., 2005; A. M. Maier et al., 2012). Arguably, this is because clear and distinct definitions ease both the descriptive and comparative purpose of the model (e.g., positioning the firm along an evolutionary scale), but also the prescriptive purpose if it gives clear guidelines and criteria for the firm to grow more mature.

It follows from this, that each stage should be labeled with a name that provides the audience with a clear indication of what it entails. However, a more thorough definition of each stage name should also be provided to elaborate on the requirements and measures of the stage. De Bruin et al. (2005) suggest that this is done either through a top-down or a bottom-up approach. From a top-down approach, the emphasis is firstly on what represents maturity and then how this can be measured. Typically, a top-down approach works well if the field is relatively new and there is little evidence of what is thought to represent maturity (Maier et al., 2012, p. 151; Rosemann & de Bruin, 2005). In a more developed domain, where there is existing evidence on what represents maturity, the focus moves first to how this can be measured and then builds definitions on this basis (de Bruin et al., 2005, p.6).

Maier et al. (2012) suggest starting the design phase by selecting the process area to be assessed. A key process area identifies a cluster of related activities that enables the achievement of a set of goals considered important for establishing process capability at each maturity stage (Domingues et al., 2016; Hammer, 2007). In existing maturity models, process areas have been labeled differently based on the improvement entity. Key attributes, components, pillars, or categories are examples of different labels that are used. However, a common goal (regardless of the label) is to identify key process areas that are mutually exclusive and collectively exhaustive. To accomplish this, the assessment should be based on an underpinning conceptual framework generated from principles of good practice (Maier et al., 2012, p. 150).

There are many ways in which the assessment of process areas can be done. Literature reviews have brought fore that the most common strategies are expert interviews (Batenburg et al., 2014; Solli-Sæther & Gottschalk, 2015), synthesizing critical and frequently mentioned concepts in the literature (Rosemann & de Bruin, 2005), and understanding and recognizing organizational process goals as a point of departure for defining the key processes. This last alternative is described more closely by Maier et al. (2012). It includes defining associated goals necessary to achieve the overall objective of the firm for so to derive key process areas from these goals (p.150).

Process areas of the CFMM

The predominant objective of the CFMM is to assess the maturity of the compliance function within Norwegian investment firms. Although the explicit establishment of separate compliance functions in the financial services sector was not evident before the late 1990s, ample literature from both academia and practitioners is available for synthesizing critical and frequently mentioned concepts (Rosemann & de Bruin, 2005). The reason is that the function was established as an answer to several business scandals exposing weaknesses in regulatory risk management and internal control (Ramakrishna, 2015; Steinberg, 2011). And that again called for more research on how the control functions should be organized to become effective and mitigate such weaknesses.

Although there is no "canon of theory to which all scientist refer" (A. M. Maier et al., 2012, p. 154) in the field of corporate compliance, existing literature is rich and cross-references are to be found concerning aspects of organizing an effective compliance function (and meeting the challenges in doing so). Also, regulatory bodies have, with regards to the MiFID II directive, explicitly stated what aspects they see as particularly important - and developed guidelines for implementing these. Therefore, a bottom-up approach has been used in defining the maturity steps of the CFMM. This means that identified factors that influence the effectiveness of the compliance function are used to define the maturity steps of the model (de Bruin et al., 2005). In addition to reviewing the research addressed in the preliminary project and guidelines from the regulatory body, a comprehensive comparison (Becker et al., 2009) of existing maturity models on corporate compliance and governance have been completed to identify key factors of the compliance function.

The review conducted in preliminary work with this thesis addresses research on firms' commitment to ethics and regulatory compliance conducted as early as in the 1990s. Already then, the discussion evolved around measuring the effectiveness of compliance programs and

their importance to firms' overall financial performance (C. Verschoor, 1998; Laufer, 1999). At the turn of the millennium, however, the research focus was expanded to also involve the identification of challenges in establishing an effective compliance function and frameworks that take note of them (Frigo & Anderson, 2009; Kharbili et al., 2008; Mitchell, 2007; Vicente & Mira da Silva, 2011).

The challenges addressed in organizing an effective compliance program was the emergence of workplace silos (Frigo & Anderson, 2009, p. 20; Kenton, 2019), costs rising from redundancy and miscommunication (Loh, 2019; PwC, 2004, p. 6), and changing environmental and regulatory conditions (Kharbili et al., 2008). As a step to meet these challenges, it seems to be commonly accepted that the compliance function should be organized to be proactive rather than reactive and that it should be part of a holistic approach to meet integrity risk. I.e., that it is coordinated with other control functions and connected to all business lines in the firm.

Appendix 1 provides details on the existing maturity models that have been reviewed. Even though they are labeled differently, there is an underlying agreement of what components are deemed important for the effectiveness of an established compliance function. For example, the review reveals that many key processes evolve around four "enablers" suggested by Deloitte (2017). Namely: people, process, technology, and analytics. More closely, it seems important that processes and policies are clearly defined and documented (*The Compliance Maturity Survey*, 2009; *RSA Archer Compliance Management*, n.d.).When it comes to people, resources (in form of requisite skills and experience) and autonomy is in focus. For technology and analytics, connected and integrated technology is important for both monitoring and reporting (Deloitte, 2017).

Looking at the compliance function requirements set out by the MiFID II directive, and made explicit in ESMA's guidelines, similarities to the above-mentioned key components becomes evident. Cf. Article 22(3)(a) of MiFID II Delegated Regulation, the compliance function must have the necessary authority, resources, expertise, and access to all relevant information to work effectively. ESMA's Guideline no. 5 on the effectiveness of the compliance function elaborates on this. What it says is that in ensuring appropriate human and other resources are allocated to the compliance function, the scale and types of investment services, activities and ancillary services undertaken by the firm must be considered. This means that the number of compliance staff coinciding with what is required for the tasks is considered important for the function's effectiveness. Further, sufficient IT resources are important, not only for the

information flow to be efficient in itself but also for the compliance staff to have access to relevant information at all times. I.e., access to relevant database and records will ensure that the compliance officer has relevant information that is important to disclose and mitigate compliance risk and plan adequate controls and policies. At last, Guideline 5 also emphasize the importance of the firm putting in place necessary arrangements to ensure an effective exchange of information between the compliance function and other business units (i.e. ensuring that it is not siloed) (ESMA, 2020b, p. 34).

Further, the first subparagraph of Article 22(2) of the MiFID II Delegated Regulation requires firms to ensure that the compliance function performs its tasks and responsibilities on a permanent basis. This is also seen as important for the effectiveness of the function, because ensuring competent persons to take over the functions of the person who usually perform the tasks, for example in the event of planned or unforeseen absences (Bahr, 2020, p.20), might save the company from violating with regulations in such periods. Therefore, the guidelines require responsibilities and processes, as well as expected competence and authority of the compliance function, to be explicitly defined and set out in a 'compliance policy' and other general policies or internal rules.

From reviewing the literature, existing maturity models, and regulatory guidelines on the domain, the following key process areas of the compliance function is suggested:

1. *Processes*

Should be clearly defined and implemented – meaning that compliance processes should have well-thought-out and documented procedures, which also must be understood by employees and other stakeholders to arrive at an effective compliance solution (*GAN Integrity*, 2020). The latter is important because having well-defined processes and policies that should mitigate risk considerably, does not help if they are not understood and followed. Laufer (1999) commented on this in his work, pointing to how the effectiveness of compliance programs was hard to determine, as the firms could "simply adopt the appearance of a program" and put less effort into actually preventing wrongdoings and violations (p.1343). Oded (2013) supplements this, saying that it will hinder firms from implementing the procedures and engage in *effective* self-policing.

2. *Resources*

Appropriate human and financial resources must be allocated to the compliance function. When it comes to human resources, ESMA (2020b) emphasizes both the capacity and

capability of the function. This means that the compliance function must have enough employees to handle the risk the firm is exposed to, and that compliance employees regularly are provided with training in order to maintain their knowledge (ESMA, 2020; FSA Norway, 2015). Sufficient financial resources (e.g., size of budget) provided to the compliance function have proven to be critical to its effectiveness. Hence, it protects the firm against financial losses and damaged reputation (C. Verschoor, 1998).

3. *Technology*

Ever since the incubation of start-ups in Silicon Valley started, firms have sought to increase efficiency and transparency through the use of technology (Deloitte, 2017, p. 5). As illustrated in existing models assessing the maturity of firms' compliance initiatives, effective compliance programs should be supported by an automated system that removes friction and gathers data and reports on real-time analytics (GAN Integrity, 2020). What technology will be right for the firm will depend on the maturity of the other key process areas, however, creating capacity for the employees to focus on activities of higher priority (from a risk perspective) through automation will enhance efficiency either way.

4. *Coordination*

Workplace silos have been defined as "groups or departments within an organization that work in a vacuum with little functional access to other groups, or little communication with them" (Loh, 2019). The lack of cooperation and communication between different risk and control functions – as well as other business units - has shown to create accountability and communication gaps, as well as redundancies and confusion (PwC, 2004, p. 6).

Vicente & Mira da Silva (2011) refers to the Open Compliance and Ethics Group's (OCEG) notion that *"compliance is the act of adhering to, and the ability to demonstrate adherence to, mandated requirements defined by laws and regulations, as well as voluntary requirements resulting from contractual obligations and internal policies".* According to Vicente and Mira da Silva, organizations need an effective approach to verify that they conform to external and internal rules. This approach is, according to OCEG's statement the responsibility of the compliance function. Vicente et al. (2011) shed light on how this function, in order to constitute an effective approach, needs assistance from risk management in identifying and prioritizing risks. And also, from the governance function which before this must have defined those risks and aligned them to corporate objectives (p.10).

5. *Business integrity*

When you want to solve a problem in mathematics, it is normal for one variable to be held constant. This metaphor is used by Ramakrishna (2015) to describe how having fundamental principles of business integrity at place is important for the effectiveness of the compliance function when both the external and internal environment of the compliance system is in a state of constant flux (p.159). This has also been a fundamental part of all the reviewed frameworks for organizing firms' governance, risk, and compliance initiatives, suggested by practitioners in the field (see for example the OCEGs and PwCs standard concepts[16]). As such, the firm's responsibility and commitment to integrity risk management (e.g. Tone at the top and Tone at the middle) is critical for the effective functioning of the compliance initiatives set to live (Deloitte, 2018, p. 9).

These five key process areas are expected to be evident in all stages of the maturity journey of the compliance function. Their characteristics, however, will evolve from the first stage to the last. Beneath, an explicit statement of the underlying rationale for the intersection of key process areas and maturity stages the CFMM will be provided as an approach to promote theoretical rigor (Lasrado et al., 2015; A. M. Maier et al., 2012, p. 151; Solli-Sæther & Gottschalk, 2015).

Maturity levels and their intersection with process areas

Following Maier et al. (2012) further; having identified key process areas, the next step in the design phase is to define a set of maturity levels and decide what rationale informs the rating scale (p.15). To ensure the comparability of maturity assessments, the criteria should exhibit a high level of intersubjective verifiability, i.e., the corresponding descriptions are precise, concise, and clear to discriminate between levels (Moultrie, 2009). For this purpose, Roeglinger et al. (2012) also call for a definition of the underlying notion of maturity and an underpinning theoretical foundation concerning organizational evolution and change. This includes among other things information about the way change typically happens in the respective application domain as well as about drivers and barriers of maturation (Poeppelbuss & Roeglinger, 2011, p. 8).

[16] OCEG's *Principled Performance* is about "the reliable achievement of objectives while addressing uncertainty and acting with integrity" (VComply Editorial, 2017).
PwC's *Integrity-Driven Performance* strategically integrate governance, risk and compliance into their business, to from an ethical and operational backbone to how businesses is managed (PwC, 2004).

According to Maier et al., (2012), what rationale informs the rating scale is related to decisions on leverage points for organizational change. Kazanjian & Drazin's (1989) argument that "organizations undergo transformations in their design characteristics which enable them to face new tasks or problems that growth elicits", underpins this. In terms of the architecture of the maturity model, what can be understood therefrom is that each maturity stage should be defined based on the characteristics of - or requirements to - the key process areas at that stage. Solli-Sæther & Gottschalk (2010) refer to this part of the modeling process as defining benchmark variables or formulating cell text.

Maturity stages in the CFMM

An analysis of cell descriptions of existing maturity models reveals how the same subject can be conceptualized in different ways. This is interesting because it says something about the researchers' views of a firm, its processes, people, and products, and these conceptualizations impact organizational change initiatives as they specify leverage points. Maier et al. (2012) have performed such an analysis and suggest four underlying notions of maturity: 1) existence and adherence to structured process; 2) alteration of organizational structure, 3) emphasis on people; and 4) emphasis on learning (p. 148).

Conceptualizing the maturity of the compliance function within firms, however, it seems deficient to rely solely on one of the aforementioned notions. Based on the identified key process areas of the compliance function (see "Process areas of the CFMM") an emphasis on the existence and adherence to structured processes seems appropriate. This, as maturity models using infrastructure, transparency, and formality as leverage points defines maturity as "the extent to which a specific process is explicitly defined, measured, controlled, and effective" (Paulk et al., 1993, referred to by Maier et al, 2012, p 148).

Defining maturity as the degree to which a process is institutionalized and effective coincides with one of the key components of the compliance function being seen as well-documented and implemented compliance processes. If one were to map out the maturity journey on this aspect alone, one could rely on the definitions suggested by the CMM model (See Appendix 1) The first level (defined "Initial") covers recently established processes performed on an ad-hoc basis, and the latter (defined "Optimized") involves processes being measured and controlled and continuously improved. Further, there has also been a focus on the support from automated systems to relieve employees in the compliance function to focus on the areas of the firm that are most vulnerable to compliance risks. Most often, the architecture of

maturity models assessing information systems is adopted from the Software CMM – evaluating the system on an ordinal scale, as exemplified above.

In terms of coordination, compliance initiatives will be more effective/mature as execution and oversight can be integrated among different control functions (Deloitte, 2017). As such a compliance function that works in a vacuum with little functional access to other groups, or little communication with them (Loh, 2019) will be seen as less effective because accountability and communication gaps will lead to poorer management of control risk. With regard to coordination of control functions, organizational change could also be initiated via structural changes in job roles and training in skills and methods—which also makes it a candidate for focus on organizational structure or people.

However, an emphasis on learning in discriminating between the maturity levels also seems adequate for this study. This, because it in a prescriptive manner can raise awareness towards adequate actions and attitudes. For example, in their study of communication in complex product development, the underlying notion of change for Maier et al. (2008) was that proactive actions are favored over reactive ones. In regard to the CFMM, one can make an example of the key process area referred to as “Business integrity”. The underlying rationale for choosing this as one of the key process areas of the compliance function is basically that the overall attitude towards responsibility and commitment to integrity risk management in the firm is critical for the effective functioning of the compliance initiatives set to live (Deloitte, 2018, p. 9). Tone at the top was set as an example of this. Tone at the top refers to the ethical atmosphere that is created in the workplace by the organization's leadership (ACFE, n.d.). What lies in this is that whatever tone the management sets will have a trickle-down effect on the employees of the firm. If the tone set by managers upholds ethics and integrity, employees will be more inclined to uphold those same values.

As for how the aforementioned is connected to the maturity of the compliance function, one can see to Ramakrishna's (2015) distinction between passive and active compliance. Positive and active compliance is defined as the proactive responsiveness of an organization to follow a set of rules and standards yielding to change without disruption of its or the systems' structure and function, inclusive in approach for the well-being of itself and its stakeholder (p. 67). This approach to compliance is believed to form a basis for many of the underlying drivers yielding the firm benefits from compliance through business integrity principles.

From the introduction, we understand that such benefits, however, only will become evident if the compliance function is organized in an effective manner. The number of resources allocated to the compliance function by the management will give indications on the mindset and attitude of the firm towards ethical business. A study by Harvey (2004) exemplifies this in a good manner. Conducting a cost-benefit analysis of compliance in financial firms, Harvey finds support for what was already well acknowledged. Namely, that avoidable costs saved by acting compliant are revenue earned. However, she also adds that it is the intangible benefits, like better reputation, competitor relationships, employee morale, and customer satisfaction (Harvey, 2004; Kenton, 2020), that really adds to the bottom line, and hence ensure value creation and perpetuates a healthy and sustainable growth of the business. So, even though the cost of compliance is high and continuously increasing, "it would be a brave person who steps up to say that it is too high a price to pay for countering terrorism and serious crime" (Whitehouse, 2003, in Harvey, 2004, p. 343). As such, in terms of resources, one can say that for the compliance function to mature, the right amount of resources – given the proportionality principle (ESMA, 2020b) – must be allocated to it.

Based on the above reasoning, the CFMM is both processes- and learning-oriented, and hence, the maturity stages and associated cell texts will be defined accordingly. See Figure 5.

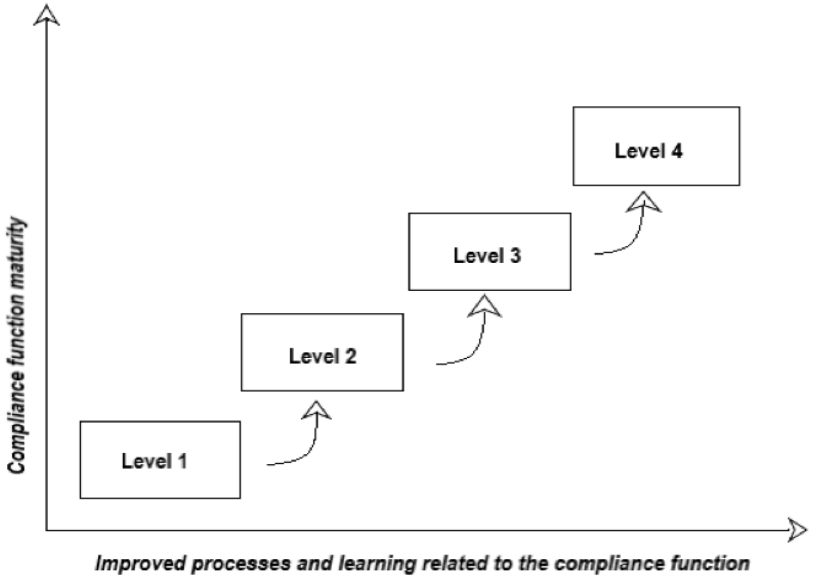


Figure 5: Conceptualized process and learning-oriented maturity model.

The stage definitions will give an immediate indication of the existence and adherence to structured compliance processes as well as whether the compliance function can be referred to as reactive or proactive. Based on existing governance and compliance maturity models and concepts from reviewed literature, the following four stages are suggested:

Level 1: Reactive and inconsistent
Level 2: Organized but reactive
Level 3: Actively managed and understood
Level 4: Proactive and implemented

For the descriptive purpose of use, cell descriptions provide specific descriptions on characteristics expected from each process area, at each distinct maturity level. They will be phrased as clear statements to avoid misconceptions in evaluating whether the cell's statement corresponds to the firm's situation. Since specific characteristics of each process area have to be implemented to reach a new level of maturity – it can be argued that improvement measures for the prescriptive purpose of use are implicitly included in the model (Poeppelbuss & Roeglinger, 2011, p. 11). The descriptions are added to the model and will therefore become evident in the next chapter.

5.2.3 Phase 3: Presenting the Compliance Function Maturity Model (CFMM)

In this chapter, the model developed to assess the maturity of the compliance function within Norwegian investment firms – The CFMM – will be presented. Until now, relevant literature on compliance and a comprehensive comparison of existing maturity models have been used as input in the modeling process. At this point, the discussions on the different building blocks of the maturity model will be summarized and merged into what can be seen as a "user guide" for the model, explaining how it should be understood and used for a maturity assessment.

Figure 5 illustrates that the greater extent to which a firm adhere to established and structured compliance processes and has a proactive approach to compliance – the more mature their compliance function is expected to be. However, it does not provide clear guidelines on how to position a firm along the evolutionary stage. That is, to decide whether a firm should be categorized as "Reactive and inconsistent" or "Actively managed and understood". Figure 6 eases the model's descriptive purpose by establishing clear and distinct criteria for what to

expect from each key process area[17] (de Bruin et al., 2005; A. M. Maier et al., 2012) at each distinct maturity stage.

As for the rating scale of the CFMM, ISO 9001 (see Appendix 1) is looked to as an example. ISO 9001 is a binary model, whereas the firm is either ISO Certified or not, depending on the overall score of maturity (M. Paulk, 1994). For the CFMM, whether the firm meets the criteria of each distinct maturity stage can be decided on, on a binary pass/fail scale (with scope for minor deviations). As such, the CFMM can be used in two different ways, which will result in the same positioning of the firm. These two "pathways" will be described in the following sections.

The first pathway starts with the assessor comparing the situation in the firm as-is, with the requirements set out in the cell descriptions associated with Level 1. Having "ticked-off" boxes that can be "ticked-off" at Level 1, the assessor moves on to perform the same activity for Level 2, and further. For the second pathway, the assessor performs the same activity of comparing the as-is situation in the firm with the cell text descriptions in the model. But, instead of moving upwards level-vise, an assessment is made for each key process. This involves comparing each key process of the CFMM with that of the firm as of today and place these at the level that fits with the real-life situation of the firm.

Regardless of which path is applied for the as-is assessment, the current situation of the firm is assessed with respect to given criteria for the different process areas (Becker et al. 2009, in Poeppelbuss & Roeglinger, 2011). Hence, in most cases, the assessor will experience that the firm does not fulfill all criteria for each distinct maturity level. For example, the compliance function might be supported by business integrity principles that foster a healthy compliance culture and compliance processes that are well-integrated into the workflow, while on the one hand, it is reactive and inconsistent in terms of technology and automated systems. Here, the prescriptive purpose of the CFMM comes into the picture.

As Feise (2020) describes it, from doing a self-assessment and taking inventory of where the compliance function stands as of today, low-hanging fruit can be identified, allowing the firm to develop a plan for addressing the function's most significant areas of growth. I.e., through understanding the as-is situation of the firm (its unique starting point), the CFMM will provide clear guidelines in form of cell descriptions as to how the firm can optimize its compliance function and organize it to be as effective as possible. From the example above,

[17] In the CFMM labeled "Key enablers".

this would involve prioritizing supporting technology and automated processes to optimize the compliance function and make it more effective.

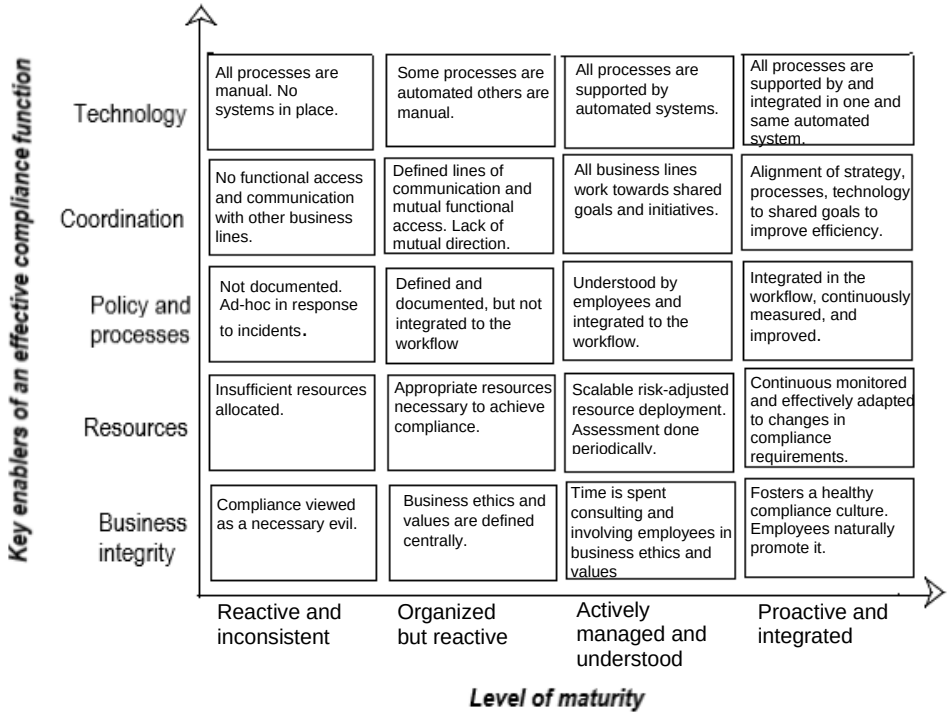


Figure 6: The Compliance Function Maturity Model

The proposed model is further to be tested (ref. Phase 3: Testing) through interviews with a Chief Compliance Officer in a relevant Norwegian investment firm. This, because the primary value of model lies in the compact presentation and its practical approach which can guide firms to improve their compliance maturity (Batenburg et al., 2014). And for that purpose, the interview will not only be useful for assessing the maturity of the compliance function within the case firm, but it will also reveal whether the model has relevance to practice (Phase 4: Evaluation). This will be the focus next, in Part B of this thesis.

Part B: Testing the CFMM in practice – An empirical study

In the introduction to this master's thesis, the main objective was presented as being the development of a compliance function maturity model for use within Norwegian investment firms. In part A, the CFMM was developed based on a set of design principles retrieved from a literature study on maturity models and complementing literature on the field of corporate compliance.

The accomplishment of the main objective, however, presupposes that the model is compatible with practice. For that reason, RQ2 was established to make sure that some underlying - but important - objectives were fulfilled. Namely, that the model was tested and evaluated in a real-life case. The methodology chapter describes how answering the research question through a case study and a semi-structured interview helped to accomplish this.

Chosen because of its capacity to exemplify the analytical object of the inquiry, an examination of the selected case firm contributes to establishing knowledge about the context in which the compliance function operates. This is important because the model is developed for assessing the maturity of the compliance function within Norwegian investment firms specifically. The questions in the interview protocol are therefore formulated so that they first and foremost capture the information considered important for conducting a maturity assessment of the firm's compliance function (See Appendix 2). However, information about the structure and other characteristics of the firm and its compliance function may also say something about the usability and usefulness of the model - and hence makes out a basis for evaluating that.

As previously explained, the interviewee was chosen due to his/her position in the case company. As Head of compliance and Risk, the interviewee is responsible for the organization of the compliance function and will thus be a relevant user of the CFMM. Allowing the interviewee to test the model in practice, without the intervention of the undersigned, allows for a more objective evaluation of the model. Therefore, at the end of the interview, the CFMM was also handed out to the interviewee for being tested in the assessment of the case firm's compliance function. Having performed this task, the second part of the interview was conducted. Here, relevant questions on what the interviewee thought of the model's structure, language, cell descriptions – i.e., information about its usability and usefulness – was posed.

In the chapters to come, data from the interview will be elaborated on and discussed in a way that allows us to come to some conclusions regarding how we stand in attaining the main objective of this research project. This starts with an introduction of the case firm and information that shed light on the firm's processes related to compliance being be presented. Next, it is mapped how the compliance function of the firm meets the requirements listed in the CFFM and based on this, a maturity assessment of the compliance function is conducted.

At last, based on both the undersigned's and the interviewee's experience using the CFFM for the maturity assessment and as an improvement framework – an evaluation of the model itself is presented.

6 Introduction of case firm

When using the segmentation function on proff.no, it appears that in Norway, 160 firms are registered under the NACE code *66,120 Securities brokerage* (*Proff – Segmenteringsverktøy*, n.d.). By filtering further, so that one is left with firms that have over 20 employees[18], 40 unique firms remain on the list. On average, these have about 85 employees. In this sense, the case firm[19] is considered representative of the industry with approximately 90 employees.

The client base of the Firm is diversified, including corporations, institutions, non-profit organizations, and private individuals. Investigating the different firms appearing on the list, this appear to be a common practice for Norwegian investment firms. Once again, confirming the relevance of testing the CFMM within the Firm.

Since it was founded in the early 2000s, the Firm has experienced strong growth. It emerges from the interview that the Firm first became large enough that it was perceived as relevant to establish a separate compliance function 5 years ago. The person who currently is Head of Compliance within the Firm was then appointed the position. Considering the period, the first years' work was characterized by adapting the business to the requirements of MiFID II.

Until last year, Head of Compliance was alone was responsible for the function. However, due to changes in the Firm's structure due to its growth, the department has now been expanded and is expected to consist of 3 full-time positions before the end of 2021.

[18] This is done to avoid counting the same employees more than one time, as it appears that the different branches of the same firms are registered as separate entities as well.
[19] Hereafter referred to as the Firm

With support from the management and the board, Head of Compliance is concerned with learning and further developing the firm's compliance function. Therefore, when requested, (s)he found it very interesting to participate in the testing the CFMM and talk about the effectiveness and organization of the function. This has, after all, been in focus in line with the Firm's evolvement.

Based on the interviews conducted, the next chapters will be used to present how the compliance function of the Firm is organized as of today, and thus how mature it is according to CFMM. Based on this assessment, a proposal will also be presented for how the function can be further developed in terms of effectiveness - ref. the model's prescriptive purpose.

6.1 Organization of the compliance function

The area of responsibility for the compliance function is to ensure compliance with laws and regulations. Within the Firm, the responsibility of the compliance function lies in the "second line of defense". That is, it is a post-control function after first-line control[20].

The regulations that must be complied with are defined based on which licenses the Firm holds - and the interviewee confirms that MiFID II is particularly important and sets out a framework for the organization of the Firm's business. Thus, The Securities Trading Act, the Money Laundering Act, and other legislation in which the MiFID II requirements are implemented, also form the basis for which the Firm's processes and routines are defined.

Following that, the Firm also defines compliance risk as a separate risk related to which deviations may occur in connection with breaches of legislation and industry standards such as the ESMA guidelines. The risks detected appear in the company's risk matrix (an explicit statement of the overall risk assessment of the firm), where all the various business areas that may involve such risks are assessed in accordance with the probability of events occurring - and their following consequences. This matrix further forms the basis for the Firm's internal control - which provides guidelines for compliance function's work (i.e., monitoring program/compliance plan).

[20] The first line owns the operational risk and must therefore ensure that satisfactory internal control is carried out by employees in the "line", i.e., advisers, case officers and like. This means implementing measures to ensure that the business is run in accordance with external and internal requirements. This includes checking and following up the risk of breaches of compliance, as well as implementing corrective measures where this is considered necessary to deal with process and control deficiencies (IIA Norge).

Furthermore, it is stated in the job description of Head of Compliance and Risk, that the function is to report to the CEO, but also directly to the board. The latter to ensure the independence of the function.

Based on the above mentioned, the compliance function within the Firm can be considered to at least meet the requirements for the function to be permanent and independent - as described in ESMA's guidelines (ESMA, 2020b, p. 6). Still, how effective the function is, is yet to be figured out.

The interview with Head of Compliance and Risk in the Firm has provided information related to the Firm's overall integrity, how resources are allocated to the compliance function, its internal policies and processes, how the compliance function interacts with other business functions, and the use of technology in its' workflow. This information will in the further be analyzed in light of the requirements of the CFMM, and eventually, result in a statement about the maturity of the function and potential measures for improvement.

6.2 Maturity assessment of the compliance function

6.2.1 Business Integrity

In the CFMM, business integrity is linked to whether the firm "fosters a healthy compliance culture in which employees naturally promote". That this is important for an effective compliance function, is in the CFMM justified by the fact that building a compliance culture in the company is critical for the effective functioning of the compliance initiatives set to live (Deloitte, 2018, p. 9; Grimstad, 2020).

When asked what the interviewee self puts in the concept of an "effective compliance function", the answer is that compliance culture is one of the things that should be in focus:

«Fundamental to an effective compliance function is to work preventively and work to create understanding among both management and employees of why the regulations are formed as they are. By this, I simply mean that one must constantly focus on building culture».

In connection with building compliance culture, reference has previously been made to what is called Tone at the Top and Tone at the Middle. This means that a firm's responsibility and commitment to integrity risk start with the management - and from there, has a triple down effect on the rest of the firm's employees. The interviewee views this as a very positive aspect within the Firm and says that *«Tone at the Top is very good. We have a board that is very*

concerned with compliance and a CEO who also wants things to be done right - and not on the edge".

It also appears that the Firm has defined values and ethical starting points that form the basis for every decision made in the Firm, regardless of business level. According to the CFMM, for these to function as building blocks in the development of an effective compliance function, it must also be natural for the Firm's employees to promote these in their daily work endeavors.

"The fact that the ethical principles form the basis for every decision in the company means that the management anchors its advice or new processes in these principles, and this, in turn, leads to all employees in the company being 'forced' to think about them"

The interviewee also emphasizes that the principles serve as a sales argument to the Firm's customers and points out that employees who want you to build a career in the industry must retain their authorization and a good reputation.

"I think the employees are seeing more and more that compliance helps with customer satisfaction as every customer appreciates getting well-documented advice and supporting explanations".

Nevertheless, it is also emphasized that although the desire to do the "right thing" is present among the middle management and employees, it should be noted that in the financial industry - there is a close connection between salary and the branch's or individual employee's performance. Further, performance is normally measured primarily in the form of quantitative goal achievement or results controls (i.e., financial measures). The problem, however, which is often elucidated in connection to this, is that financial results controls (especially those who focus on current-period accounting profits) can cause employees to become excessively short-term oriented, or myopic, in their decision-making (Merchant & Van der Stede, 2017, p. 449). According to the interviewee, this is something that is being worked on preventively within the Firm.

"For example, we have a remuneration scheme that hits managers and employees in the front office quite hard. If controls show that they are not compliant with rules and regulations and, for example, give poor advice to a client this is at the expense of the 'thickness of their wallet'".

According to the law firm Erling Grimstad AS, which assists their clients with regulatory compliance in anti-money laundering and privacy, many of the firms that succeed in developing compliance culture, carry out quality control of employees' compliance with routines and procedures.

"The fact that errors and shortcomings are captured by the employees' closest managers, or through quality controls, means that employees receive concrete feedback on which tasks are to be solved and what the individual must improve" (Grimstad, 2020).

In other words, when employees know that they are being measured and understand what they are being measured by, their attention and expectations are focused accordingly.

To this extent, in terms of the CFMM, it can be argued that the Firm is mature when it comes to business integrity. This, because they have a board and management that is focused on building compliance culture within their firm, and where there is a doubt as to whether rules and regulations come before any wish for monetary value, control systems are in place to ensure the right priorities to be made. In the words of the interviewee,

"We are secured through soft values and harsh punishments, in the sense that if you are not compliant, you lose your bonus. This is part of laying the foundation for good compliance assessments to be made".

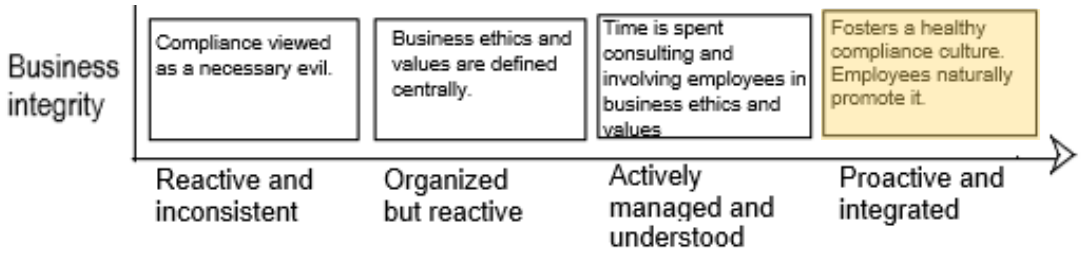


Figure 7: Maturity assessment related to business integrity (Excerpt taken from the CFMM)

6.2.2 Resources

The number of resources allocated to the compliance function can often be reflected in what has so far been discussed and evaluated as mature - namely the Firm's, and then especially the management's overall attitude towards compliance.

Until now, it has been announced that the Firm has a board and management that are very concerned about compliance - and it is therefore not unexpected that the interviewee can

inform that both the board and management are responsive when it comes to allocating resources to the compliance function when needed. The number of resources and the types of resources that are to be allocated are considered once a year through budget negotiations. However, this is also monitored on an ongoing basis, should there occur any changes that are not considered in the budget negotiations. The interviewee refers to an example that illustrates this:

"The company was actually supposed to put in place an extra resource in the compliance function already in April this year, but the person concerned went on parental leave. As resources were needed it was then arranged so that another person, who was not really to be admitted until August, got to start earlier".

Based on this information, it can be assumed that the Firm does not consider having a compliance function a "necessary evil". Rather, the interviewee informs that appropriate resources are allocated to the function, both in terms of a risk-adjusted resource deployment through budgeting, and ad-hoc in accordance with changes in compliance requirements. This coincides with the cell description in Level 4, related to resource allocation.

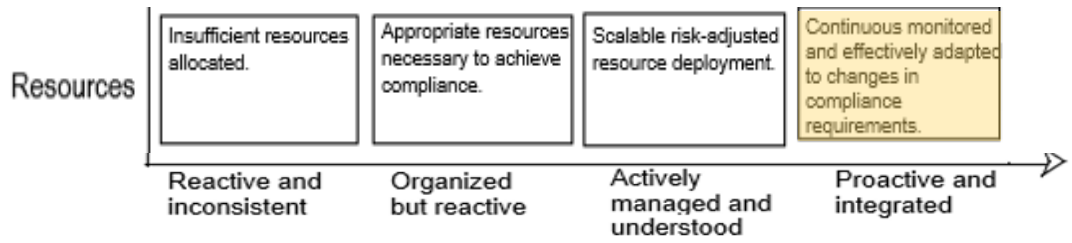


Figure 8: Maturity assessment related to resource allocation (Excerpt taken from the CFMM).

6.2.3 Policies and processes

To arrive at an effective compliance solution, having well-defined processes and policies that mitigate compliance risk are helpful. This presupposed that they are understood and followed by employees (Feise, 2020).

According to the informant, the Firm has defined policies and processes that are documented and available to all employees. It is also added that *"We know that it takes more than making the pile of instructions and routines available for employees for these to be integrated into their daily work tasks"*. The Firm, therefore, arranges for policies and processes to be

understood by the employees through various channels. Work with this starts already in the onboarding process for new employees and is followed up through the employment relationship through a prepared training plan that applies to all employees.

The compliance function is considered to be proactive when it comes to building a compliance culture, and it seems like business integrity is implemented in the Firm's code of conduct. As part of this, it is viewed as important that compliance is involved in defining new routines to ensure that processes are carried out in accordance with relevant laws and regulations.

What is described as even more important, however, is that *"most often we try to include an employee from each office when new routines are to be defined"*. This, both to get input from those who actually sit with the processes in practice - but also to ensure training and understanding.

"If you have a person who feels responsible for the routine out in the branches, it is more likely that he or she will stick to the 'case' and create focus on it among the rest of the employees".

The fact that compliance also performs checks on the employees' performance in connection with established processes also leads to training and follow-up of each employee individually. Also, *"these kinds of controls have often shown to reveal gaps in routines that require them to be updated*". This entails that the Firm's processes and policies are continuously updated.

According to the interviewee, updates are not only done in response to incidents but also constantly, in line with new interpretations and circulars that come from the FSA. *"For example, the Firm's guidelines were updated and approved by the board last autumn, prior to the Firm applying for a new license"*.

From the above discussion, one can argue that the Firm's policies and processes are integrated into the workflow through instructions and routines in which the employees are expected to follow in their daily work endeavor. Further, training programs and controls carried out ensures that the processes are understood and continuously improved. Hence, also in terms of policies and processes, the Firm's compliance function can be labeled proactive and integrated.

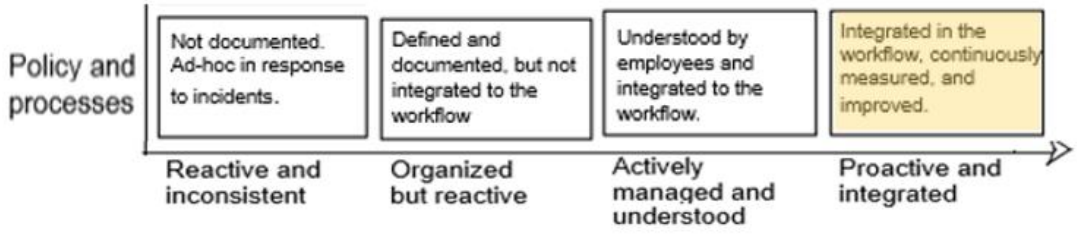


Figure 9: Maturity assessment related to policy and processes (Excerpt taken from the CFMM).

6.2.4 Coordination

Lack of cooperation and communication between the compliance function and other business units has been shown to create accountability and communication gaps, as well as redundancies and confusion (Loh, 2019; PwC, 2004).

Although it is emphasized that there is always room for improvement, the interviewee is satisfied with how the compliance function interacts with other business lines within the Firm. For example, it is pointed out that regular weekly meetings with the CEO have been set up, as well as periodic meetings with the board. Furthermore, Head of Compliance is a permanent member of what is called the project group for development projects. That, to advise the group on how the various projects should be prioritized with regard to compliance risks.

One challenge the Firm has faced related to coordination, which has now been improved, is the lack of a communication channel between compliance and the first line. The interviewee refers to this channel as "business compliance" or “business support”.

«The fact that the Company has been in great growth has meant that compliance has made discoveries and identified risks which should be left to the first line of defense to rectify. However, the first line has been so congested at times that these things have been downgraded, and compliance has had to be much more involved in the change itself to get these improvements through. That is not really compliance's task and therefore incorrect use of resources».

According to the CFMM, concerning coordination, one shall also assess how information is made available to the compliance function. This is also mentioned by the interviewee as particularly important, and it is described as a matter of course that compliance must have access to all documentation available in the firm – quoting: "*there should be no barriers".*

That it is seen as natural, or even taken for granted, that compliance is participating in management meetings and projects is for the Firm seen as a measure both to ensure proactive compliance (again, referring to building compliance culture) and to mitigate any information barriers.

So, when it comes to the key enabler *coordination,* the Firm is on the ball. It has improved previous communication gaps that have created congestion for the compliance function in being left with tasks that were not within their scope of work tasks. Further, regular interaction with the management, the board, and the project group testify that the Firm has an overall goal in which business integrity plays an important part. In this way, it can be said that the interaction and information flow between the various business functions is actively managed and understood. As the next section will elaborate on, it is positioned at that level because there is room for improvement when it comes to using technological tools to improve any friction in how the function is getting a hand on needed information.

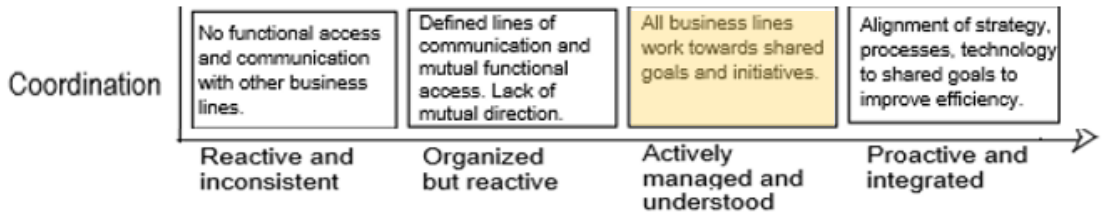


Figure 10: Maturity assessment related to coordination (Excerpt taken from the CFMM).

6.2.5 Technology

When it comes to coordination and how the business areas communicate with each other, it is natural that technology also comes into the picture. As the CFMM shows, a proactive and integrated compliance function implies that the various business areas work towards a shared goal. An alignment of strategy, processes, and *technology* between these will improve the effectiveness in achieving that.

Until now, the Firm's compliance function is considered relatively mature in terms of how it works to enhance business integrity through building compliance culture, how the management is responsive when it comes to resource allocation, and that policies and processes are constantly measured and improved. When it comes to coordination, on the other hand, there seems to be some room for improvement. This seemingly lies in the existence of a gap between what the interviewee refers to as a dream situation *"having a dashboard with*

access to all relevant information gathered in one place", and today's solution where *"the information is available and we have access to relevant data, but it can feel a little cumbersome and convoluted to find".* For example, to control whether a client lies within its chosen mandate, the interviewee explains that the compliance officer performing the check physically must enter various data programs and excel lists to assess this.

The thing about technology and automatization is that this is often the last building block that comes into place when it comes to establishing new business functions. This because processes must be tested and best practices identified before they are automated (Falck-Ytter, 2021). It can be understood that this also applies to the compliance function within the Firm. "*There is a limit to what is a must-have, and what is nice to have"*, and according to the interviewee, this decides what is prioritized first.

However, as understood by the analysis so far, the Firm mostly has what the CFFM describes as "must-haves" in place. And, according to the interviewee, the Firm is aware that there exists a gap in terms of technology and communication and has therefore initiated an infrastructure project.

"Once the project is in place, the compliance function will have access to better reports. For example, related to order receipt, more automated processes, with systems for flagging or notifications will require fewer resources from compliance being used in, for example, controls related to clients' mandates».

However, this is an as-is assessment of the maturity of the compliance function within the Firm, and therefore, improvements from the infrastructure project will not have implications for how the Firm score in terms of technology at this point. From the above information, it seems like as of today, some processes are automated while others are manual. This seems to have implications for the capacity of the compliance function, which from a risk perspective should spend more time and resources on activities of high priority rather than having to spend time gathering data for routine and repeatable compliance processes. One can say that in terms of technology, the function is organized – but reactive, because of the many activities that still are manually handled.

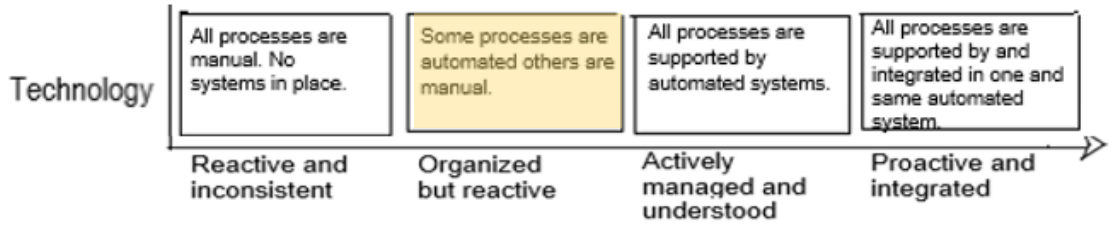


Figure 11: Maturity assessment related to technology (Excerpt taken from the CFMM).

6.3 Further effectivization measures

Having assessed the Firm's compliance function with respect to the given criteria for the different key enablers defined in the CFMM, Figure 6 can be used for developing a plan addressing the function's most significant areas of growth. I.e., it provides guidelines for how to organize the compliance function to become more effective.

By obtaining information about how the compliance function is organized as of today, from the CCO within the Firm, the compliance function is assessed to be at Level 3 (Actively managed and understood). The reasoning is, that despite the fact that three out of five key processes were evaluated as proactive and integrated (i.e., level 4), scoring at levels 3 and 2 in regard to coordination and technology implies that there is still room for improvement.

Earlier, it has been stated that using technology as a measure for enhancing efficiency depends on the maturity of other key process areas. This has had its implications for the structure of the CFMM, and thus, how assessing the function's key enablers starts with business integrity and moves upwards – ending with technology.

The interviewee mentioned that there exists a distinction between "must-have" and "nice to have". The same distinction can be interpreted as existing in the CFMM, involving that when the "must-haves" are in place, what is "nice to have" often comes in form of technology implemented to enhance efficiency. For example, compliance processes required by law are first implemented in workflow routines. And, once these are fully integrated – those of them that are manual (and therefore time-consuming) should be automated, creating capacity for the compliance function to focus on tasks that, according to the Firm's risk matrix are of higher priority.

In short, one can look to the CFMM and advise the Firm to invest in technology that supports and integrates all compliance processes in one and same automated system. However, as stated in the introduction to this thesis, such changes cannot be made overnight. This implies

that the process of getting to that point must be taken step-vise. For the Firm, this will according to the cell descriptions in the CFMM (i.e., its guidelines), involve looking into whether and how processes that currently are manual can be automated - before these are integrated into one system.

Having access to all relevant information from all business units in one place will enhance coordination and remove the friction that today steals time from the compliance function. Therefore, integrating all compliance processes in one system should also involve access to relevant information from all business units important for monitoring and assessing these processes.

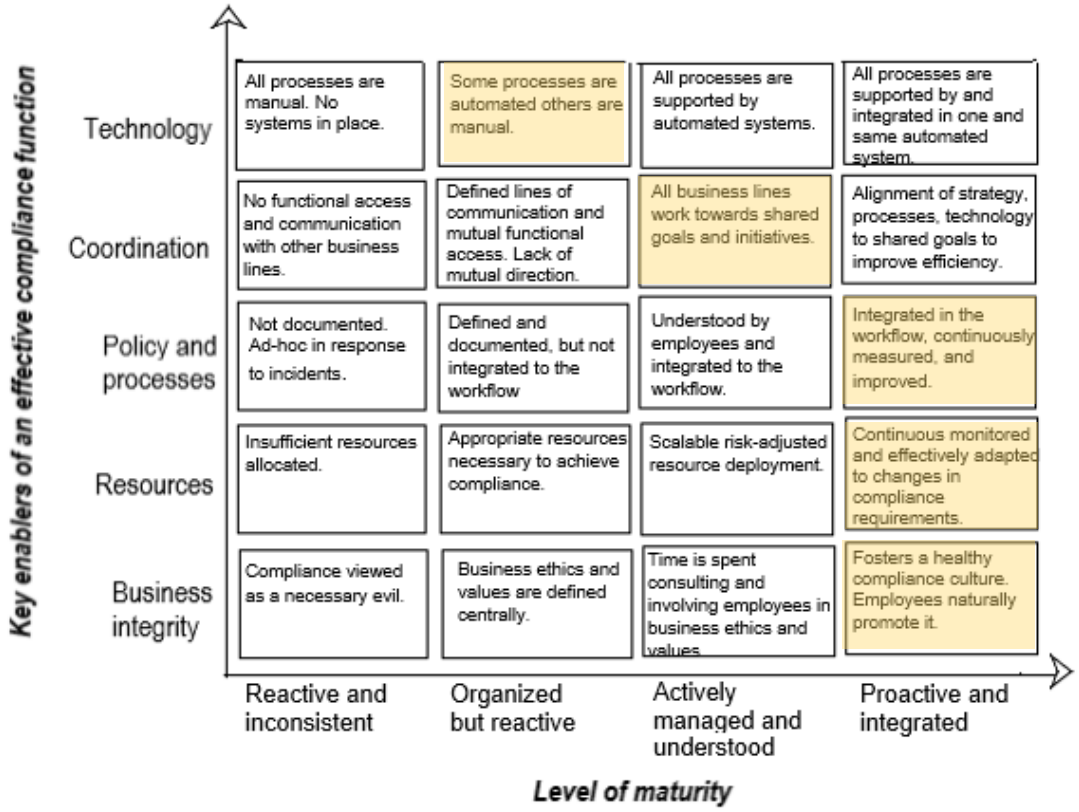


Figure 12: Maturity assessment of the case firm's compliance function using the CFMM.

7 Discussion

The following chapter will be divided into two parts. The first part concerns an evaluation of the CFMM. This is considered an important part of the discussion chapter because it makes out the basis for evaluating the development process. Not only that of the CFMM specifically but also for maturity models in general as the current process was inspired by ideas from existing development framework suggested in research.

7.1 Evaluation of the CFMM

An important phase in the development process of a maturity model is *model evaluation*. This phase naturally follows the model being tested in practice, as feedback on whether the model fulfilled its defined success criteria for *usability* and *usefulness* is provided (A. M. Maier et al., 2012).

Ideally, model evaluations are conducted within companies or institutions that are independent of the development (A. M. Maier et al., 2012, p. 152). This, because it is the choices made during the planning and design phases that are tested. Hence, as part of the interview with Head of Compliance in the case firm, the CFMM was handed out for it to be tested in practice.

Together with a set of questions posed at the start of the interview, before any CFMM-related information was presented, this allowed for the model to also be evaluated by someone other than the undersigned who has posed as the decisionmaker during the development process.

7.1.1 Success criteria 1: Usability

In the planning phase (See chapter 5.2.1) it was stated that the CFMM was intended to be used by investment firms in the Norwegian financial market. As such, success criteria for usability pertains to things such as whether the cell descriptions are understandable and relatable and that the structure of the model is intuitive for industry professionals - not demanding prior knowledge of maturity models for its use. In short: the model must be tested for validity and relevance (A. M. Maier et al., 2012).

First, proving the relevance of the CFMM includes there being some degree of agreement on what particular elements need to be included in, or excluded from, the model. According to

Maier et al. (2012), this is part of justifying the theoretical framework underlying the selection of process areas.

Allowing for an element of subjectivity, this was looked into through questioning the interviewee to name what elements (s)he considered most important in establishing an "effective compliance function". This question was posed early in the interview, to avoid any bias due to questions related to the content of the model being asked later on.

Comparing the elements named by the interviewee to the key enablers defined in the CFMM, there are many similarities to them. One of the first elements called out as particularly important by the interviewee is the establishment of a compliance culture within a firm. This is thought of as elementary because it lays a basis for other important elements such as resource deployment, access to information, and interaction with and across business units. Seeing a well-established compliance culture as elementary for an effective compliance function coincides with naming the first key enabler in the CFMM "Business Integrity". As Koehn (2005) stated, "*integrity properly understood is not only some add-on feature for business; it is at the core of sound business"* (p.134). And, in sense, a sound business is what the compliance function strives towards.

In the CFMM the next key enabler listed is "Resources". This is not mentioned directly by the interviewee but rather incorporated into the discussion by highlighting "staffing" as another important element.

«One must make an overall assessment related to staffing within the compliance function where one assesses what kind of risks the company is exposed to…. and which areas are in focus at the FSA. Based on the overall assessment, the firm must look into what is sufficient in terms of staffing".

As such, it can be understood; that in connection with staffing and other resources allocated to the compliance function, the interviewee sees having the proportionality principle in the back of mind as important for effectiveness. Interpreting the cell descriptions of the CFMM, one can understand that this is also used as a basis in the structuring of the model. For example, through the upper levels focusing on processes and resource allocation being continuously measured, and subsequently improved or increased. This underlying thought, seemingly shared with the interviewee, also helps to validate the theoretical basis for the different levels and corresponding cell descriptions.

That a healthy compliance culture forms the basis for whether the compliance function has access to all relevant information comes from it mitigating barriers between the compliance function, the management, and other business units. As such, when the interviewee is mentioning the element of having *"access to all documents and information in the firm"*, this can arguably be seen as corresponding to the cell descriptions related to the key enabler "Coordination" in the CFMM.

Not explicitly in the model, however, is there a key enabler that considers whether members of the compliance function have an eye for business.

"Personally, I believe that being conscientious and wanting to do things right, but, at the same time being able to see the business part of it all, is one of the key requirements for an effective compliance function".

As an example, the interviewee shows to having worked in many companies where Head of Compliance have come straight from working as a lawyer.

"Things then are often seen from a very narrow point of view and the legislation is not adapted to fit the business. Compliance then is suddenly considered more of a brake pad and goodwill from the organization is consequently lost".

Previously it was stated that for the effective functioning of the compliance initiatives set to live, there should be an underlying compliance culture that all employees support (Deloitte, 2018, p. 9; Grimstad, 2020). If employees feel that the compliance function does not "play at the same team", one can assume that such support and culture will weaken. For example, in such situations, it is more likely that the employees will work their way around established compliance routines that would require extra effort from them (Merchant & Van der Stede, 2017). Based on this, incorporating a distinct key enabler that considers whether compliance is striving to adapt legislation to go hand-in-hand with firms' business endeavors could be relevant for the CFMM.

However, one could also argue that this is an element that is already implemented to the model under the umbrella term, "Coordination". That, because coordination is very much about the alignment of strategy in the attempt to reach common goals. This does not only go one way. The compliance function must align its strategy with that of the firm, just as much as the firm must align its strategy - and consequently processes - to answer to certain compliance objectives.

After having had the opportunity to test it in practice, the interviewee provided feedback on the architecture of the model as well. Overall, it was considered easy to understand both in terms of its structure and content. According to the interviewee, clear cell descriptions made the overall assessment easier.

However, an interesting question related to the key enablers chosen for the model was raised after the interviewee had gotten more acquainted with its' structure.

"What if the assessor finds it that the compliance function scores at the highest level for all the key enablers named in the CFMM – but there is lack of knowledge among its employees – can the function really be mature, then?"

The reason why this question is found interesting is that it touches upon the underlying notion of maturity in the model. As a consequence of the model being developed based on the researcher's subjective interpretations of existing literature, the model first and foremost says something about what that person sees as drivers and barriers for maturation (Poeppelbuss & Roeglinger, 2011).

On the one hand, subjectivity can be seen as weakening the usability of the model because the assessor might feel confused with assessing the function when a component, he or she sees as important, is missing. However, the model also leaves room for subjective interpretations from the assessor's side. For example, when it comes to how he or she chooses to understand each key enabler and related cell descriptions. So, on the other hand, subjective interpretations can also be seen as strengthening usability. This, because it makes it easier for different assessors to use the model when it can be adapted and understood in a way that fits firms' various situations.

However, to comment on "knowledge" as a missing element, one can start by showing to the underlying notion of maturity in the CFMM which concerns improved processes and learning related to the compliance function (See Figure 5). What lies behind this, is the thought that existence and adherence to structured compliance processes as well as the compliance function being proactive, is what drives its' effectiveness. The latter is discussed up against what measures the firm takes that perpetuate a healthy and sustainable growth of the business. As part of this, resource allocation comes into the picture (Harvey, 2004).

In choosing "Resources" as one of the key enablers for an effective compliance function – human resources were discussed. Not only in terms of capacity but also capability. The latter

refers to how resources are allocated in terms of training in order to *maintain* the knowledge of compliance employees (ESMA, 2020; FSA Norway, 2015). Using the word "maintain" comes from it being a prerequisite for having established a compliance function in the first place, that compliance employees have the necessary level of knowledge and/or expertise. This is for Norwegian investment firms, the responsibility of the firm's board when they are appointing the CCO (Cf. Article 22(3)(a) of MiFID II Delegated Regulation).

In short – knowledge not being explicitly mentioned in the model does not mean that it is not considered an important element. Rather it is seen as a prerequisite for the compliance function, and therefore it is thought of as incorporated in the discussion on resources instead of being a distinct key enabler in the model.

Nevertheless, the overall verdict related to usability is that there is correspondence between the author's findings and the understandings of the interviewee. This verdict is based on the similarities found between the author's and the interviewee's statements regarding elements considered important in organizing an effective compliance function. Having discussed the aspect of "knowledge" as brought fore by the interviewee, it can be argued that such a correspondence also applies to the theoretical rationale underlying the structure of the model - as this component, in the model, is seen as a prerequisite. In short – the CFMM can be considered relevant and valid.

7.1.2 Success criteria 2: Usefulness

The next success criteria, *usefulness*, pertain to whether the model shows out the be helpful. This is linked to whether it triggers reflection and learning among its audience (A. M. Maier et al., 2012, p. 153). In other words – it is about whether its intended users would consider using the CFMM as a tool for mapping its function per se, and further use it as an improvement framework.

After getting acquainted with the model, the interviewee tells that (s)he is in favor of using this kind of model in any future work on improving the effectiveness of the compliance function. (S)he also sees it as relevant that other parts of the administration use the model - especially the top management.

"I believe that the model can make the top management aware of what it actually takes for the compliance function to work effectively. By using the model in an assessment, one is forced to think about each aspect of this".

Based on this, it can be understood that the CFMM at least stimulates learning effects, as Maier et al. (2012) refer to. However, for the model to be useful and worth spending time on for a firm, it should also lead to effective plans for improving a certain situation (e.g., raise the level of maturity in terms of technology). In the existing literature, maturity models have been criticized for being too simplistic to be useful (Lasrado et al., 2015, p. 7). To some extent, this is also brought fore by the interviewee.

"Maybe that is the way it's supposed to be, but I feel like the model would be even more useful if it came with an appendix – or like – that provided greater details on how to get from one level to another".

Here, the interviewee refers to how the cell descriptions are meant to be used as guidelines for planning further work to enhance the function's effectiveness. I.e., the prescriptive purpose of the CFMM. Although the cell descriptions themselves are considered *"absolutely relevant guidelines"*, the interviewee finds them a little too simple. (S)he would want even more detailed information on how to proceed from having positioned the function at level 3, as is, and plan for it to move towards a higher level.

"If compliance is seen as a necessary evil, how should one specifically initiate the work of defining business ethics and values?".

7.1.3 Sub-conclusion

As a step towards model verification, the CFMM has now been evaluated against the success criteria and requirements defined during Phase 1 - planning (A. M. Maier et al., 2012, p. 152). The overall verdict, based on feedback from the interviewee, is that the CFMM was both user-friendly and useful. However, there is always room for improvement, and points that have been made regarding the usefulness and usability of the model will be taken into consideration in the next subchapter discussing the development process of maturity models.

7.2 The development process of maturity models

In chapter 1, it is announced that the main objective of this research project is the development of a compliance function maturity model. In connection to this, RQ1 was formulated as follows: *How can the effectiveness of the compliance function within Norwegian investment firms be evaluated using a maturity model?*

To answer that question, a literature study on the modeling process of maturity models was initiated. Here, criticism towards maturity models and their development was looked into to ensure that these were tried encountered in the attempt to develop a compliance function maturity model. For that reason, ideas from pre-existing research suggesting different procedures for the modeling processes were used as inspiration for the development process.

7.2.1 Meeting criticism

In conducting the literature review, it became evident that researchers have struggled with the development of maturity models, facing challenges related to them being both theoretically and empirically validated (Benbasat et al., 1984; Lasrado et al., 2015; Solli-Sæther & Gottschalk, 2010). As such, it was understood that in the development of a compliance function maturity model - these were problems that needed to be met wisely.

The first problem in developing maturity models is related to them lacking a theoretical foundation (Lasrado et al., 2015, p. 6). This, for example, in terms of developers simply adapting to their model the structure of models that already have wide acceptance - but that may have been developed for other purposes. Looking to how this problem is tried solved in previous research (A. M. Maier et al., 2012; Solli-Sæther & Gottschalk, 2010), an established body of knowledge in the field of corporate compliance were looked to when decisions related to what key enablers, maturity levels, and related cell descriptions to include in the CFMM were made.

Existing literature on the field of corporate compliance proved to be rich and cross-references were found concerning aspects of organizing an effective compliance function. Together with a comparison of existing maturity models concerning corporate compliance and governance (a step suggested by Becker et al. (2009)), it was possible to conceptually ground the structure of the CFMM in theory.

However, that the model is theoretically founded does not help if it is not empirically validated. For this purpose, suggested development frameworks for maturity models propose different methods. For example, Solli-Sæther & Gottschalk (2010, 2015) propose carrying out a survey for the elements of the conceptual model to be empirically tested. Maier et al (2012) follow another strategy, which includes synthesizing viewpoints from future users through model applications in eight relevant firms.

As Part B of this paper presents, an attempt has been made to validate the CFMM empirically by using a case study method. Instead of sending out a survey, as suggested by Solli-Sæther & Gottschalk (2010, 2015), or test the model in various relevant firms (A. M. Maier et al., 2012), the CFMM was tested in an assessment of the compliance function within one chosen case firm. This, through interpreting data from an interview with Head of Compliance and Risk within that firm, and also letting that person test the model in practice. As the Firm was selected because of its capacity to offer "exemplary knowledge" (Thomas, 2011), the findings could provide implications to whether the model could be validated for use in practice.

However, as indicated earlier, the way the development process has foregone has implications for the final result – and remarks made by the interviewee after testing the CFMM may point to steps in the development process that should be revised.

7.2.2 Revision based on feedback

The remarks made by the interviewee first and foremost concern decisions related to what elements the CFMM presents as key enablers for an effective compliance function, and how the model could be "true" if one important element is overlooked. These concerns can be related to the success criteria of usability - which again pertains to the architecture of the model.

The model's architecture, i.e., its stages, key enablers, and cell-descriptions, significantly impacts its use (A. M. Maier et al., 2012, p. 150). During the design phase, it was argued how each of these elements being distinct, well-defined, and show logical progression would ease both the prescriptive and descriptive purpose of the model (de Bruin et al., 2005; A. M. Maier et al., 2012). As a means to attain such a result, it was looked to de Bruin et al. (2005), who recommends choosing between a top-down or bottom-up approach in structuring key enablers and maturity stages of the model.

As pointed out above, evidence on what represents maturity (or effectiveness) related to the compliance function could be found in existing literature in the field of corporate compliance. This allowed for a bottom-up approach, whereas key enablers in the CFMM were first selected before the rest of the model was built based on how these elements can be measured (de Bruin et al., 2005, p. 6).

Many that have researched the modeling process of maturity models find such a practice to only be sufficient in providing a theoretical starting point (See: Becker et al., 2010; A. M.

Maier et al., 2012; Solli-Sæther & Gottschalk, 2010). According to these, other means of identification are necessary to provide a comprehensive list of possible key enablers for the developer to choose from. Often repeated are panel interviews or focus group interviews where one is to synthesize the elements mentioned most often - or the elements that are considered most critical. However, when the developer has limited access to resources, de Bruin et al. (2005) argues that the most important issue when populating a model is to select the combination of research methods throughout the process that is most appropriate for model development in the context of earlier scoping decisions and desired model outcomes (p.8).

As for the development process of the CFMM, the options related to the key enabler selection process were limited due to both the time frame of the project and pandemic-related restrictions. These limitations were identified before starting the research project, and scoping decisions were made well-knowing of them. As the model's scope was decided to be domain-specific, a "theoretical starting point" was seen as providing necessary insight into the peculiarities of corporate compliance. These peculiarities were looked more deeply into, not only with reference to research but also to relevant legislation and ideas from practitioners in the field (e.g., financial authorities and consultant agencies).

As the desired outcome was a model for use within Norwegian investment firms, one of the last steps towards validation in the development process consisted of a "testing phase". This included discussing the most prominent elements selected for the model in an interview with an industry professional. In the foregoing chapter, this was also described as a way of meeting the criticism of maturity models lacking empirical validation.

In the frameworks reviewed as part of the literature study, the testing phase is considered an important part of the development process of maturity models being referred to as iterative (e.g., Becker et al., 2010; de Bruin et al., 2005; Maier et al., 2012; Solli-Sæther & Gottschalk, 2010). Referring to the process as iterative implies that once the suggested model has been presented and tested, it should be "revised" based on the feedback received. However, studies conducted by these scholars, are commonly lengthy. See e.g., Solli-Sæther & Gottschalk (2015), whose "Stages-of-growth model for outsourcing, offshoring and backsourcing" was developed over several years. In contrast to a research project lasting approximately 20 weeks, this allows for more extensive testing of the model.

In preparing their development framework, Solli-Sæther & Gottschalk (2010) refers to previously developed maturity models. They point especially to how conceptual models have been based on interviews or their practical insight into the field of investigation, and to a lesser extent have had these tested and revised (p. 284). Therefore, they suggest including an exploratory survey in the testing phase. For their maturity model, such a survey was conducted among 133 major firms considered relevant. Only 50 of the responses were considered usable in revising the model.

Maier et al. (201) also make a point regarding this last phase. According to their research, evaluations may be continued until a saturation point is reached. I.e., until no more significant changes are being suggested by participants and/or until evaluation results are satisfactory (p. 151).

From the above, one can argue that only having tested the CFMM in one relevant firm and discussed its elements and architecture with one industry professional solely, is not sufficient for moving forward to revise the model. Hence, this phase is not completed for the CFMM.

7.2.3 Sub-conclusion

Given the research context, it is reasonable to argue that steps have been taken to ensure well-informed decisions related to model architecture. With a lengthier timeframe for the project, however, the CFMM could be tested in more than one case firm and modified based on feedback. This could enhance both its usability and usefulness.

Still, the overall verdict when it comes to the attainment of the success criteria defined for the CFMM - is that these are attained.

8 Conclusion

The suggested model – the CFMM – indicates a path of evolution whereas the compliance function matures from being reactive and inconsistent to it becoming a proactive and integrated part of a firm’s business endeavors. With this as a basis, the CFMM has been used to assess the state of the compliance function within the selected case firm as of today and to provide general guidelines on how it can be organized to become more effective.

As such, both RQ1 and RQ2 have been answered - and in doing so, this research project has made both theoretical, practical, and methodological contributions.

8.1 Contributions

8.1.1 Theoretical contributions

This research project has presented a comprehensive overview and comparison of existing frameworks for the development process of maturity models. Subsequently, a compliance function maturity model has been developed following various phases suggested in these. In doing so, this research project offers the opportunity to also comment on existing research in which those frameworks are founded.

The development process of the CFMM has been evaluated based on how the proposed model was thought to attain its defined success criteria of usability and usefulness. Findings related to this align with those of other scholars, emphasizing the importance of developing maturity models that are both theoretically founded and empirically validated.

To be able to conceptually ground the structure of the CFMM in theory, it was resorted to measures suggested in previous research by Solli-Sæther & Gottschalk (2010), Maier et al.(2012), and Becker et al. (2009). The measures, involving the researcher looking to an established body of knowledge on corporate compliance and previously developed maturity models for the compliance function, helped with the accomplishment of this. As such, the current research project also affirms these scholars' work on how to meet with established criticism on maturity models lacking theoretical foundations.

Further, aiming for empirical validation of the model, the CFMM was tested in a relevant case firm. The model was considered both usable and useful by a representative from its intended audience. This implies that the findings of this study can not only affirm the specific measures to meet criticism. Also, the different development phases suggested in previous research can be acknowledged. This, because the phases resorted to consist of various steps towards attaining the criteria of usability and usefulness.

A note to this, however, is that the development of the CFMM was not based on one specific framework solely. Rather, ideas from different frameworks were used. As such, the current research project cannot acknowledge the work of one specific scholar. On the other hand, these findings may imply that a canon of theory to which all scientists refer is emerging in research on maturity model development. This brings new light to previous research, like that of Wendler (2012), who identified a gap in the literature when it came to theoretical reflections on the concept of maturity.

The reasoning behind this statement can be explained as follows. In conducting an extensive literature review on the different development frameworks that existed in literature, it was disclosed how all of these were built to achieve the same purpose. Namely, to develop maturity models that can be theoretically and empirically validated, and therefore can be considered usable and useful for its intended audience. Aiming for the same goal, the suggested frameworks also consist of many of the same elements, only defined and described differently. This implies that future developers of maturity models could look to any of the suggested frameworks and still get many of the same advice regarding underlying theories, quality criteria, or circumstances supporting successful usage of their model (Wendler, 2012, p. 1331).

8.1.2 Practical contributions

For practitioners, the CFMM represents an improvement framework in which can help with identifying where a firm's compliance function stands as of today, and further provide guidelines for its improvement.

Through assessing specific characteristics of the function's key enablers, users of the model are provided with a set of considerations that deserve special attention (Solli-Sæther & Gottschalk, 2015, p. 93). Findings from this research project confirm that this attribute is particularly important and suggest that it can lead to better understandings of what is needed for managing and planning the evolution of the compliance function.

For the maturity models usable and useful in practice, however, it follows their key enablers must be of relevance in their intended area of application. The key enablers selected for the CFMM are based on current legislation and regulations applying to all Norwegian investment firms. This speaks for the model being of relevance to its intended area of application. Further, by comparing the key enablers defined in the CFMM to elements considered most important by the interviewee (who represents the model's intended users), the similarities between these further confirm that.

However, in reviewing existing maturity models for assessment of firms' risk functions (See Appendix 1 for an overview of these), this study finds that many of those lack sufficient empirical evidence for them to be validated. Despite what was just stated above, this is a concern that neither the CFMM comes without. For that reason, practitioners should be aware of what maturity model they choose to use. The CFMM and this study pose as a good example of why. Even though legal requirements in the industry are the same for all firms,

practitioners should also pay attention to the individual research context and compare that to the situation of their firm before applying the model.

8.1.3 Methodological implications

As for the methodological implications, we look to the decisions made regarding the research design and methods chosen for this research project. As this paper is divided into Part A and Part B consisting of different research methods – the methodological implications will be discussed accordingly.

For the literature study, searches for potentially relevant articles were done through various databases (see chapter 3.2). As research on maturity models is conducted by researchers within diverse disciplines (Wong et al., 2013), using a narrative approach was thought to be the better choice to ensure that potentially relevant literature wasn't left out because of any pre-specified inclusion criteria. Such a comprehensive search resulted in a vast array of relevant articles. However, the number of articles that were eventually analyzed was relatively low.

For the narrative literature review, a four-staged process suggested by Demiris et al. (2019) was looked to. Based on experiences from adhering to that process in selecting relevant literature for this study, methodological implications for conducting similar studies can be made.

First, the identification of keywords was not only are relevant to extend the search, as suggested by Demiris et al. (2019). It also proved helpful in narrowing down the number of articles considered relevant, as those who did not contain specified keywords could be weeded out. This, through the use of different filtering options in the databases. Second, it was decided to document the literature review (see
Table 2) even though there aren't any rules for narrative review processes demanding such. This was first and foremost done for the sake of transparency for the reader– and can be viewed as a measure to maintain research quality (Demiris et al. 2019). However, an overview of the articles which also included the most important points made in each was also useful for the researcher to look back at in discussing findings of the current study.

Further, findings from the literature study indicated that research on maturity models is anticipated to involve some kind of empirical proof. As such, researchers developing maturity models should substantiate these with both a theoretical foundation and empirical evidence.

The fact that established criticism of maturity models also relates to this, emphasizes the importance of the methodological implication below.

Part B represents the empirical study conducted for his research project. Here, a qualitative approach involving a single case study was used to test the model developed in Part A. This, as part of establishing empirical proof to validate the model's suitability to practice. This paper concluded with the CFMM being valid and of relevance to its intended area of application.

Using a single case study for such a purpose, when there is that little foundation for what concerns external validation of the findings, is a well-known concern (Bryman et al., 2019). However, what this research project and its findings have shown, is that this might be an unnecessary concern. Even though data from one single interview is thought of as being too little to base model modifications on – the findings that emerged from it provide the basis for concrete and context-dependent knowledge, which is of importance to the type of research problem investigated in this research.

8.2 Limitations and further research

Based on what implications have emerged from this research project – suggestions for further research can be provided. Some of these come as a result of limitations to this study, while others are suggested to extend and improve the state of knowledge in the field - where room for such has been identified.

In evaluating the quality of the current research project in regard to Lincoln and Guba's (1985) four quality criteria (See chapter 3.4), threats towards the respective were also mentioned.

First, mentioned as a threat towards the credibility of the findings produced, is that of the researcher's own experiences and viewpoints being methodologically biased. An example of this is when the researcher focuses on data confirming his or her thoughts, expectations, or personal experiences (Formplus, n.d). I.e., data that favors their own "hypothesis". To deal with this threat, findings from the literature study were tested in a case study. The researcher's interpretations from the case study were then validated through member checking. Still, it has been mentioned that case studies cannot offer scientific rigor in the same way as, for example, formal experiments do. And this could be seen as a limitation of this research project.

The first suggestion for further research also emerges from limitations emerging from the case study method used for validating the model. As mentioned in the discussions on the development process of the CFMM, it was decided not to revise the model based on feedback from one interview and testing solely. The decision was based on points made in previous research, that enough evaluations should be assessed to be able to reach a point where no more significant changes are being suggested by participants. As the "revision phase" contributes to enhancing the usability of the model developed, it is suggested that the CFMM is tested in more cases and modified based on feedback from those. This, because multiple case studies - for example, cross-case studies - to a greater extent are thought to justify some confidence in the propositions derived from its analysis (Brookes et al., 2014, p. 242).

Another suggestion – this one related to enhancing the usefulness of the CFMM – is to conduct a longitudinal study whereas the researcher follows the process from the CFMM being used for an as-is assessment and further through the improvement process. This would be interesting because the current research project has not conducted studies that can say anything about the correlation between the guidelines presented in the model and the actual improvement of the compliance function's effectiveness.

At last, to improve the state of knowledge within research on maturity models in general – two more suggestions are provided.

Throughout the literature study conducted in Part A of the current research project, it became evident that there exist several conceptual descriptions for the development process of maturity models. However, empirical evaluations of such frameworks are fewer – and if they exist, they are often undertaken by the same researchers who proposed the framework (e.g., Becker et al., 2010; Solli-Sæther & Gottschalk, 2015).

To some extent, the development of the CFMM can be viewed as an attempt to provide empirical evidence that these frameworks are sound. However, it is based on different ideas from various of these, and therefore, it is not just one specific framework that is tested. Hence, a suggestion for future research could be to address one of these frameworks specifically - and test it step by step – to find evidence that could confirm, contradict, or bring new light to previous research. If testing the whole process is too comprehensive, testing of distinct phases can also be relevant. For example, it could be looked into whether different steps of the design phase suggested by Maier et al. (2012) ensures that the model attains its defined success criteria related to usability and usefulness.

Also – as part of the theoretical contributions - indications were made that a canon of theory in the field of maturity models could be seen as emerging. This was thought to bring new light to previous research like that of Wendler (2012). However, for this to be more than just an assumption, a more thorough literature review should be conducted. As a suggestion for further research, it is therefore encouraged to replicate the study of Wendler (2012), aiming to structure and analyze the available literature in the field of maturity model research to identify the state-of-the-art research.

References

ACFE. (n.d.). *Tone at the top: How management can prevent fraud in the worlplace*. Association of certified fraus examiners. Retrieved February 24, 2021, from https://www.acfe.com/uploadedFiles/ACFE_Website/Content/documents/tone-at-the-top-research.pdf

BAHR. (2017). *MiFID II og norske aktører* (6th ed.). https://issuu.com/bahr1/docs/mifid_ii_og_norske_akt_rer

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Bassey, M. (1999). *Case study research in educational settings*. Open University Press.

Batenburg, R., Neppelenbroek, M., & Shahim, A. (2014). A maturity model for governance, risk management and compliance in hospitals. *Journal of Hospital Administration*, *3*. https://doi.org/10.5430/jha.v3n4p43

Becker, J., Knackstedt, R., & Pöppelbuß, J. (2009). Developing Maturity Models for IT Management. *Business & Information Systems Engineering*, *1*(3), 213–222. https://doi.org/10.1007/s12599-009-0044-5

Becker, J., Niehaves, B., Poeppelbuss, J., & Simons, A. (2010, January 1). *Maturity Models in IS Research.* 18th European Conference on Information Systems, ECIS 2010.

Benbasat, I., Dexter, A. S., Drury, D. H., & Goldstein, R. C. (1984). A critque of the stage hypothesis: Theory and empirical evidence. *Communications of the ACM*, *27*(5), 476–485. https://doi.org/10.1145/358189.358076

Blog, F. (nov 12). *Research Bias: Definition, Types + Examples*. https//www.formpl.us/blog/research-bias

Blum, D. (2020, February 17). *Security maturity assessments focus on people, process, and technology*. Security Architects Partners. https://security-architect.com/how-to-assess-security-maturity-and-roadmap-improvements/

Brookes, N., Butler, M., Dey, P., & Clark, R. (2014). The use of maturity models in improving project management performance: An empirical investigation. *International Journal of Managing Projects in Business*, *7*(2), 231–246. https://doi.org/10.1108/IJMPB-03-2013-0007

Bryman, A., Bell, E., & Harley, B. (2019). *Business research methods* (Fifth edition). Oxford University Press.

Byrne, J. A. (2016). Improving the peer review of narrative literature reviews. *Research Integrity and Peer Review*, *1*(1), 12. https://doi.org/10.1186/s41073-016-0019-2

C. Verschoor, C. (1998). *A Study of the Link between a Corporation's Financial Performance and Its Commitment to Ethics*. 9.

Compliance Week and Thomson Reuters—The Compliance Maturity Survey. (2009). https://www.iia.nl/SiteFiles/CW_COMPLIANCE_MATURITY_SURVEY_RESULTS.pdf

COSO. (2004). *COSO's Enterprise Risk Management – Integrated Framework | ERM - Enterprise Risk Management Initiative | North Carolina State Poole College of Management*. https://erm.ncsu.edu/library/article/coso-erm-framework

Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. SAGE Publications. https://books.google.no/books/about/Qualitative_Inquiry_and_Research_Design.html?id=bjO2AAAAIAAJ&redir_esc=y

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. SAGE.

de Bruin, T., Freeze, R., Kulkarni, U., & Rosemann, M. (2005). Understanding the Main Phases of Developing a Maturity Assessment Model. *Australasian Conference on Information Systems*.

Deloitte. (2017). *Compliance modernization is no longer optional—How evolved is your approach*. https://www2.deloitte.com/content/dam/Deloitte/pe/Documents/risk/us-compliance-modernization%20(1).pdf

Deloitte. (2018). *Compliance Risk Management Powers Performance*. https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/risk/deloitte-nl-risk-compliance-risk-management-powers-performance.pdf

Demiris, G., Oliver, D. P., & Washington, K. T. (2019). Chapter 3—Defining and Analyzing the Problem. In G. Demiris, D. P. Oliver, & K. T. Washington (Eds.), *Behavioral Intervention Research in Hospice and Palliative Care* (pp. 27–39). Academic Press. https://doi.org/10.1016/B978-0-12-814449-7.00003-X

DFØ. (2009). *Internrevisjon og intern kontroll i statlige virksomheter—En kartlegging* (p. 58). Direktoratet for forvaltning og økonomistyring. https://dfo.no/filer/Fagomr%C3%A5der/Rapporter/Arkiv/R0409-Internrevisjon-og-intern-kontroll-i-statlige-virksomheter-en-kartlegging.pdf

Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU Text with EEA relevance, 32014L0065, EP, CONSIL, OJ L 173 (2014). http://data.europa.eu/eli/dir/2014/65/oj/eng

Domingues, P., Sampaio, P., & Arezes, P. M. (2016). Integrated management systems assessment: A maturity model proposal. *Journal of Cleaner Production*, *124*, 164–174. https://doi.org/10.1016/j.jclepro.2016.02.103

Drnevich, P. L., & Kriauciunas, A. P. (2011). Clarifying the conditions and limits of the contributions of ordinary and dynamic capabilities to relative firm performance. *Strategic Management Journal*, *32*(3), 254–279. https://doi.org/10.1002/smj.882

EBA. (2019, July 4). *Interpretation of the concept of senior management laid down in Article 3(1)(9) of CRD IV*. European Banking Authority. https://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2018_4286

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, *14*(4), 532–550.

ESMA. (2020a). *ESMA provides guidance on the compliance function under MiFID II*. https://www.esma.europa.eu/press-news/esma-news/esma-provides-guidance-compliance-function-under-mifid-ii

ESMA. (2020b). *Final Report Guidelines on certain aspects of the MiFID II compliance function requirements* (p. 43).

EY. (2015). *The world of financial instruments is more complex. Time to take action. Capital markets reform: MiFID II*. https://eyfinancialservicesthoughtgallery.ie/wp-content/uploads/2015/06/EY-MiFID-II-Client-Brochure-MiFID-II-Time-to-take-action-LR.pdf

Falck-Ytter, K. (2021, March 4). *Visma-sjef: – Dette er hva digitalisering egentlig handler om*. Visma Blogg - om teknologi, regnskap, skatt, lønn, innkjøp, HR. https://www.visma.no/blogg/vidar-evensen-digitalisering-intervju/

Feise, J. (2020, November 4). *Compliance Program Maturity Model: How Do You Rank?* GAN Integrity. https://www.ganintegrity.com/blog/compliance-program-maturity-model/

Finanstilsynet. (2017, December 4). *MiFID II / MiFIR*. Finanstilsynet. https://www.finanstilsynet.no/

Fraser, P., Moultrie, J., & Gregory, M. (2002). The use of maturity models/grids as a tool in assessing product development capability. *IEEE International Engineering Management Conference*, *1*, 244–249. https://doi.org/10.1109/IEMC.2002.1038431

Frigo, M. L., & Anderson, R. J. (2009, February). A strategic framework for governance, risk, and compliance. *Strategic Finance*, *90*(8), 20+. Gale Academic OneFile.

Gay, P. D., & Gay, G. P. and A. D. of the P.-P. P. P. D. (2005). *The Values of Bureaucracy*. Oxford University Press.

Green, B. N., Johnson, C. D., & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: Secrets of the trade. *Journal of Chiropractic Medicine*, *5*(3), 101–117. https://doi.org/10.1016/S0899-3467(07)60142-6

Grimstad. (2020, July). *Advokatfirmaet Erling Grimstad AS*. governance. https://www.governance.no

Hammer, M. (2007, April 1). The Process Audit. *Harvard Business Review*. https://hbr.org/2007/04/the-process-audit

Harvey, J. (2004). *Compliance and Reporting Issues Arising for Financial Institutions from Money Laundering Regulations: A Preliminary Cost Bene®t Study*. 14.

ISO. (2020). *ISO/CS : Information for visitors*. 7.

ISO - About us. (n.d.). ISO. Retrieved April 27, 2021, from https://www.iso.org/about-us.html

Karp, B., Sacksteder, E., O'Brien, J., Bergman, M., Gonzalez, R., & Buergel, S. (2018, October 5). The Financial Crisis 10 Years Later: Lessons Learned. *The Harvard Law School Forum on Corporate Governance*. https://corpgov.law.harvard.edu/2018/10/05/the-financial-crisis-10-years-later-lessons-learned/

Kazanjian, R. K., & Drazin, R. (1989). An Empirical Test of a Stage of Growth Progression Model. *Management Science*, *35*(12), 1489–1503.

Keen, R. (2019, August 16). *ISO 9001 Requirements*. Https://Www.Iso-9001-Checklist.Co.Uk/. https://www.iso-9001-checklist.co.uk/iso-9001-requirements.htm

Kenton, W. (n.d.). *The Ins and Outs of Financial Instruments*. Investopedia. Retrieved January 23, 2021, from https://www.investopedia.com/terms/f/financialinstrument.asp

Kenton, W. (2019). *Governance, Risk Management, and Compliance (GRC) Explained*. Investopedia. https://www.investopedia.com/terms/g/grc.asp

Kenton, W. (2020). *How Cost-Benefit Analysis Process Is Performed*. Investopedia. https://www.investopedia.com/terms/c/cost-benefitanalysis.asp

Kharbili, M., Sebastian, S., Markovic, I., & Pulvermüller, E. (2008). Towards a framework for semantic business process compliance management. *CEUR Workshop Proceedings*, *339*, 1–15.

Koehn, D. (2005). Integrity as a Business Asset. *Journal of Business Ethics*, *58*(1–3), 125–136. https://doi.org/10.1007/s10551-005-1391-x

Kohlegger, M. (2009). *Understanding Maturity Models*. 11.

Lasrado, L., Vatrapu, R., & Andersen, K. N. (2015). *MATURITY MODELS DEVELOPMENT IN IS RESEARCH: A LITERATURE REVIEW*. https://doi.org/10.13140/RG.2.1.3046.3209

Laufer, W. S. (1999). Corporate Liability, Risk Shifting, and the Paradox of Compliance. *Vanderbilt Law Review*, *52*, 1341.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. SAGE.

Loh, G. (2019). *GRC Silos and Principled Performance*. Linkedin. https://www.linkedin.com/pulse/grc-silos-principled-performance-grace-loh-2d

Maier, A., Kreimeyer, M., Hepperle, C., Eckert, C., Lindemann, U., & Clarkson, P. (2008). Exploration of Correlations between Factors Influencing Communication in Complex Product Development. *Concurrent Engineering Research and Applications*, *16*. https://doi.org/10.1177/1063293X07084638

Maier, A. M., Moultrie, J., & Clarkson, P. J. (2012). Assessing Organizational Capabilities: Reviewing and Guiding the Development of Maturity Grids. *IEEE Transactions on Engineering Management*, *59*(1), 138–159. https://doi.org/10.1109/TEM.2010.2077289

March, S. T., & Smith, G. F. (1995). *Invited Paper Design and natural science research on information technology*.

Merchant, K. A., & Van der Stede, W. A. (2017). *Management control systems: Performance measurement, evaluation and incentives* (Fourth Edition). Pearson.

Mettler, T. (2011). Maturity assessment models: A design science research approach. *International Journal of Society Systems Science*, *3*(1/2), 81. https://doi.org/10.1504/IJSSS.2011.038934

Mitchell, S. L. (2007). GRC360: A framework to help organisations drive principled performance. *International Journal of Disclosure and Governance*, *4*(4), 279–296. https://doi.org/10.1057/palgrave.jdg.2050066

Morse, J. M. (2008). Does Informed Consent Interfere With Induction? *Qualitative Health Research*, *18*(4), 439–440. https://doi.org/10.1177/1049732307313614

Moultrie, J. (2009). *Developing maturity grids for assessing organisational capabilities: Practitioner guidance*. https://www.academia.edu/3391266/Developing_maturity_grids_for_assessing_organisational_capabilities_Practitioner_guidance

Msib, A. S., & Foster, P. L. (2019). *An Implementation Guide for the Healthcare Provider Industry*. 36.

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, *18*(2), 34–35. https://doi.org/10.1136/eb-2015-102054

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *16*(1), 1609406917733847. https://doi.org/10.1177/1609406917733847

NSD. (n.d.). *Norwegian Centre for Research Data*. NSD. Retrieved May 30, 2021, from https://nsd.no/en

Oded, S. (2013). *Corporate Compliance*. Edward Elgar Publishing.

Paulk, M. (1994). *A Comparison of ISO 9001 and the Capability Maturity Model for Software*.

Paulk, M. C., Curtis, B., Chrissis, M. B., & Weber, C. V. (1993). *Capability Maturity Model(SM) for Software, Version 1.1*. 82.

Poeppelbuss, J., & Roeglinger, M. (2011, June 9). *What makes a useful maturity model? A framework of general design principles for maturity models and its demonstration in business process management*. 19th European Conference on Information Systems, ECIS 2011.

Proff® – Segmenteringsverktøy. (n.d.). Retrieved March 21, 2021, from https://proff.no/laglister?i=66.120&samplerFilter=true

Pullen, W. (2007). A public sector HPT maturity model. *Performance Improvement*, *46*(4), 9–15. https://doi.org/10.1002/pfi.119

PwC. (2004). *Integrity-Driven Performance—PDF*. https://docplayer.net/9573578-Integrity-driven-performance.html

PwC State of Compliance Study 2016—Laying a strategic foundation for strong compliance risk management. (2016). 22.

Ramakrishna, S. P. (2015). *Enterprise compliance risk management: An essential toolkit for banks and financial services*. http://www.books24x7.com/marc.asp?bookid=82428

Roeglinger, M., Poeppelbuss, J., & Becker, J. (2012). Maturity Models in Business Process Management. *Business Process Management Journal*, *18*, 328–346. https://doi.org/10.1108/14637151211225225

Rosemann, M., & de BRUIN, T. (2005). *Application of a Holistic Model for Determining BPM Maturity*. 21.

RSA Archer® Regulatory & Corporate Compliance Management. (n.d.). 9.

Rummler, G. A., & Brache, A. P. (1990). *Improving Performance: How to Manage the White Space on the Organization Chart*. Wiley.

Savin-Baden, M., & Major, C. H. (2012). *Qualitative research: The essential guide to theory and practice*. Routledge.

Schjødt. (2018). *MiFID II inntas i norsk lov fra årsskiftet – Særnorske egenhandelsregler er historie*. https://www.schjodt.no/news--events/nyhetsbrev/mifid-ii-inntas-i-norsk-lov-fra-arsskiftet--sarnorske-egenhandelsregler-er-historie/

Singh, D. (2005). Basel Committee on Banking Supervision: Compliance and the compliance function in banks. *Journal of Banking Regulation*, *6*(4), 298–300. https://doi.org/10.1057/palgrave.jbr.2340198

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Solli-Sæther, H., & Gottschalk, P. (2010). The Modeling Process for Stage Models. *Journal of Organizational Computing and Electronic Commerce*, *20*(3), 279–293. https://doi.org/10.1080/10919392.2010.494535

Solli-Sæther, H., & Gottschalk, P. (2015). Stages-of-Growth in Outsourcing, Offshoring and Backsourcing: Back to the Future? *Journal of Computer Information Systems*, *55*(2), 88–94. https://doi.org/10.1080/08874417.2015.11645760

Stake, R. E. (1995). *The Art of Case Study Research*. SAGE.

Steinberg, R. M. (2011). *Keys to Getting It Right - Governance, Risk Management, and Compliance: It Can't Happen to Us—Avoiding Corporate Disaster While Driving Success*. Wiley. https://learning.oreilly.com/library/view/governance-risk-management/9781118102572/chapter01.html

TechTarget. (2014). *What is compliance risk ?* SearchCompliance. https://searchcompliance.techtarget.com/definition/compliance-risk

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Teo, T. S. H., & King, W. R. (1997). Integration between Business Planning and Information Systems Planning: An Evolutionary-Contingency Perspective. *Journal of Management Information Systems*, *14*(1), 185–214. JSTOR.

Thomas, G. (2011). A Typology for the Case Study in Social Science Following a Review of Definition, Discourse, and Structure. *Qualitative Inquiry*, *17*(6), 511–521. https://doi.org/10.1177/1077800411409884

Torraco, R. J. (2016). Writing Integrative Literature Reviews: Guidelines and Examples: *Human Resource Development Review*. https://doi.org/10.1177/1534484305278283

VComply Editorial. (2017). What is principled performance and how to achieve it? *The Governance Blog*. https://blog.v-comply.com/principled-performance/

Vicente, P., & Mira da Silva, M. (2011). A Conceptual Model for Integrated Governance, Risk and Compliance. In R. King (Ed.), *Active Flow and Combustion Control 2018* (Vol. 141, pp. 199–213). Springer International Publishing. https://doi.org/10.1007/978-3-642-21640-4_16

Wendler, R. (2012). The maturity of maturity model research: A systematic mapping study. *Information and Software Technology*, *54*(12), 1317–1339. https://doi.org/10.1016/j.infsof.2012.07.007

Wong, G., Greenhalgh, T., Westhorp, G., Buckingham, J., & Pawson, R. (2013). RAMESES publication standards: Meta-narrative reviews. *Journal of Advanced Nursing*, *69*(5), 987–1004. https://doi.org/10.1111/jan.12092

Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.

Appendix 1: An overview of the maturity models for the compliance domain reviewed for this study

The table provides a summary of six maturity model reviewed for this study. The sample consists of maturity models developed by academic researchers, industry, and consulting firms, provided they meet the criteria for the literature review in comparison of existing maturity models, as set out in the methodology chapter.

Who is behind the model	Maturity levels	Description
Carnegie Mellon University Software CMM CMU is a global research university known for its interdisciplinary programs: arts, business, computing, engineering, humanities, policy and science.	1. Initial 2. Repeatable 3. Defined 4. Managed 5. Optimizing	The CMM for Software describes the principles underlying software process maturity and is intended to help software organizations improve the maturity of their software processes in terms of an evolutionary path from ad hoc, chaotic processes to mature, disciplined software processes. Each maturity level is decomposed into several key process areas that indicate the areas an organization should focus on to improve its software process. Key process areas identify the issues that must be addressed to achieve a maturity level (M. Paulk, 1994)
ISO 9001 ISO (International Organization for Standardization) is an independent, non-governmental international organization with a membership of 164* national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges (ISO, 2020).	1. ISO Certified 2. Not ISO Certified	ISO 9001 sets out the criteria for a quality management system, based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. When the quality management principles are complied with by companies, they can be certified. This reassures clients that the company has established a proper Quality Management System (*ISO - About Us*, n.d.; Keen, 2019)
RSA Archer® Regulatory & Corporate Compliance Management (2020) RSA Archer is a for profit company that provides organizations with technology to address challenges across security, risk management and fraud prevention in the digital era-	1. Siloed 2. Transition 3. Managed 4. Transform 5. Advantages	The RSA Archer Maturity Model for Regulatory and Corporate Compliance Management focuses on building key capabilities over time, implementing a broad strategy with tactical, intelligently designed processes. The key capabilities involve understanding of business context, effective adaption to changes in compliance requirements (regulatory obligations), aligned and functional governance across the organization, and an end-to-end solution in operational controls.
Compliance Week and Thomson Reuters - The Compliance Maturity Survey (2009)	1. Siloed and inconsistent 2. Organized but reactive 3. Actively Managed and proactive	The goal of the survey was to ascertain the functional, historical, process, and system maturity of companies' compliance program. Focus on the compliance programs being coordinated, orchestrated

Compliance Week, published by Wilmington plc, is a business intelligence service on corporate governance, risk, and compliance that features daily news and analysis, a quarterly print magazine, proprietary databases, industry-leading events, and a variety of interactive features and forums. Thomson Reuters is a provider of solutions for governance, risk and compliance (GRC) including comprehensive software solutions, training, and expert GRC professional services.	4. Fully integrated and embedded	and managed in unison, offering complete visibility across the global enterprise (p.4).
Compliance Program Maturity Model (2020) GAN is provider of the Risk and Compliance Portal which is home to country risk assessment reports, regulatory compliance guides, and compliance best practices.	1. Developing 2. Defined 3. Structured 4. Optimized 5. Efficient	Maturity model consisting of five critical elements that are strong indicators of a program's development. Each of these elements impacts a compliance program's ability to foster a culture of compliance, distribute compliance communications across the organization, and gain executive buy-in and support. Elements: Defined processes, resources and autonomy, connected technology, analytics and reporting, business value.
The modernized Compliance Risk Management Framework, Deloitte (2017) Deloitte is one of the world's largest providers of professional services in auditing, consulting and legal services	1. Nonexistent 2. Minimal 3. Reactive 4. Evolving 5. Proactive 6. Optimized	The framework is underpinned by eight key organizational compliance elements: governance, policies and procedures, risk assessment and regulatory change, monitoring and testing, data, measurement and reporting, escalation, investigation and resolution, communication, awareness and training, and regulatory interaction and coordination. Enablers are people, process, technology and analytics (p.13).

Appendix 2: Interview protocol

Part 1 of the interview – before testing the model:

Subject	Suggested questions	Notes
Introduction	• Information about the study and how the interview will unfold. • General information about the interviewees position and areas of responsibility in the company	
General information on internal control and compliance	• Has the company defined what lies in the concept of Compliance risk? → If yes - how is it defined? • What do you put in the term «an effective compliance function»? • How far would you say the company has come in the work of establishing an effective compliance function - since MiFID II was implemented in Norwegian law in 2019?	
More about the compliance function	• Which resources / capabilities / processes do you consider most important for a well-functioning compliance function? → How would you briefly and concisely define an effective compliance function based on these?	
Questions related to key enablers as described in the model:		
«Business integrity»	• How would you describe "Tone at the top / middle" in the company, in terms of compliance? • Does the company have defined values and ethical starting points for business management? → Are all of the company's employees familiar with these? → Is it natural for employees to follow these? How would you say the compliance culture in the firm is?	
«Resources»	• Are necessary/sufficient resources allocated to the function? → If additional resources are needed, will these be allocated? • What is the basis for assessing the need for resources? → How often are these assessments made? → Budget negotiations...	

«Policy and processes»	• Does the firm have defined compliance policies and processes? → How is it arranged for these to be understood and followed by employees? → Are they integrated in the workflow? → When/how are they updated?	
«Coordination»	• How does the compliance function interact with other business functions? → Is there any communication gaps? → Overlaps? • Defined lines of communication? • Common goals and direction?	
«Technology»	• How is technology used to make the compliance function more efficient today? →Automated processes? →A common/integrated system?	
Model evaluation		
Usability	• How do you think the points we have been through so far represent important elements for an effective compliance function? • How did you think the structure of the model works in terms of usability? • Is the language of the model understandable?	
Usefulness	• After being presented with/tested the model: → Would you consider using such a model in future work with improving the effectiveness of the compliance function? → Do you consider the "cell descriptions" to be relevant "guidelines" → Has the model in any way triggered reflection or learning?	
Concluding	• Thank you • What happens next? → Member check	

Part 2 of the interview – getting acquainted with the model/testing:

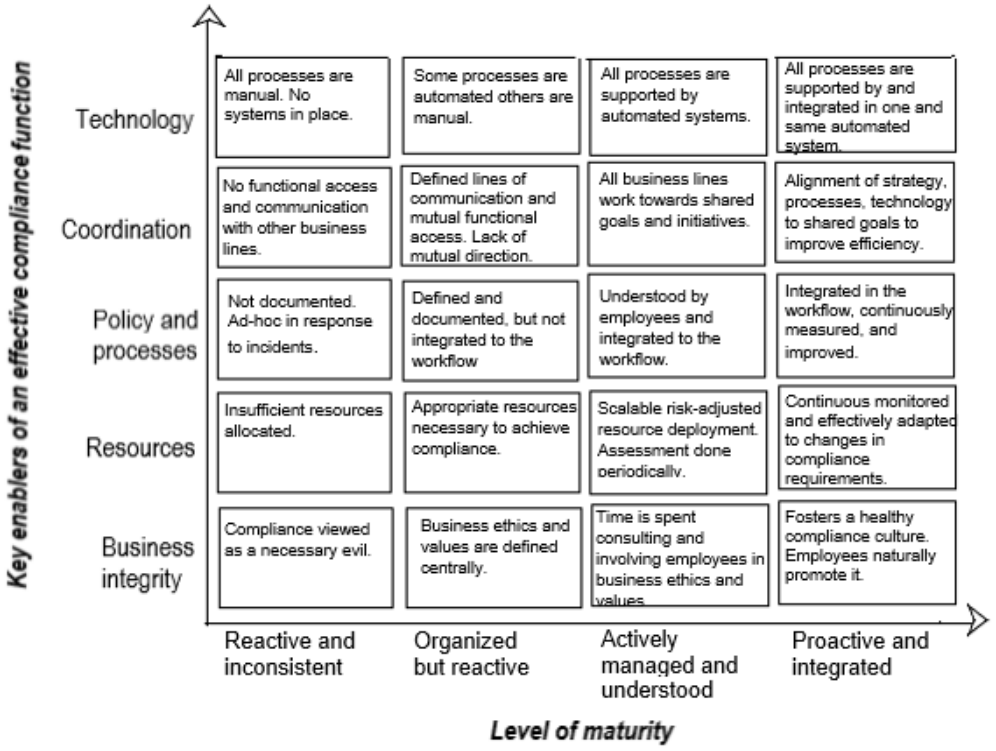
Interview Part 2

Using the model below, a firm's organization around the compliance function as it is today can be assessed with regard to given criteria for the various process areas. This, in order to map its «maturity» (efficiency).

In short, one considers each individual key enabler (see the Y-axis) and evaluates this against the criteria in the model (the descriptions in each of the boxes). One then ticks off for the description that best matches the current situation in the ones firm.

When the exercise has been performed for each of the key enablers, the idea is that cell descriptions at a higher level (along the x-axis) than the one “ticked off” can be used as "guidelines" in further efficiency work.

An example of this could be that the function is considered reactive and inconsistent when it comes to technology and automated systems (Level 1). In that case, you look at the next box, which gives indications of what it takes to get to a higher level. Here, a start would be to automate processes that seems to be ready for such.



Based on this brief introduction, and the proposed model:

- How do you think the structure of the model works in terms of usability?
- Is the language in the model understandable?
- Would you consider using this type of model in future work with improving the effectiveness of the compliance function?
- Do you consider the "cell descriptions" to be relevant "guidelines"?
- Did the model in any way trigger reflection or learning?

NB: As the case company is Norwegian, and the interviewee is Norwegian speaking, the interview was held in Norwegian. A Norwegian version of the information sheet belonging to part 2 was also sent to the interviewee.

Appendix 3: Information and consent form

Vil du delta i forskningsprosjektet

«En modenhetsmodell for compliancefunksjonen i norske verdipapirforetak»?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt tilknyttet en mastergradsavhandling hvor formålet er å utvikle en modenhetsmodell for compliancefunksjonen i norske verdipapirforetak. I dette skrivet fremkommer det informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål
Formålet med prosjektet er å utvikle en modenhetsmodell for compliancefunksjonen i norske verdipapirforetak. Modenhetsmodeller brukes i forskjellige domener for å vurdere modenheten til en valgt forretningsprosess, funksjon, program eller system. Modenhetsmodellen som er tenkt utviklet i dette prosjektet skal fungere både som et verktøy for å vurdere modenheten til et selskaps compliancefunksjon, og som et rammeverk som gir retningslinjer for hvordan funksjonen kan forbedres.

I første omgang vil modellen utvikles basert på en litteraturstudie, hvor gjeldende lovgivning og retningslinjer fra tilsynsmyndigheter - samt ideer fra eksisterende forskning på rammeverk for hvordan compliancefunksjonen bør organiseres - er i fokus. Ettersom modellen er ment å brukes av og være nyttig for norske verdipapirforetak, vil neste steg i utviklingsprosessen innebære at modellen testes for hvorvidt den er kompatibel i praksis. Dette vil gjøres gjennom at modellen tas i bruk ved evaluering av compliancefunksjonen i et norsk verdipapirforetak. En slik evaluering vil gjøres i samarbeid med personen i selskapet som er ansvarlig for compliancefunksjonen.

For selskapets del vil evalueringen gi implikasjoner for hvor «moden» deres compliancefunksjon er per i dag, og videre gi føringer på hvilke prosesser som eventuelt kan forbedres for at funksjonen skal bli mer moden (eller organiseres til å bli mer effektiv).

Hvem er ansvarlig for forskningsprosjektet?
Universitetet i Sørøst-Norge (USN) er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?
Du får spørsmål om å delta i studiet på bakgrunn av din stilling i selskapet du er ansatt i. Det er kun du som får denne henvendelsen da du har ansvaret for compliancefunksjonen i selskapet, og dermed også vil være personen som kunne benyttet seg av modenhetsmodellen.

Hva innebærer det for deg å delta?
Hvis du velger å delta i prosjektet, innebærer det at du deltar i et intervju. Det vil ta deg ca. 1 time. Intervjuet vil innebære spørsmål om organiseringen av compliancefunksjonen i selskapet du er ansatt i, samt hvilke prosesser og ressurser som er tilegnet funksjonen. Jeg tar lydopptak og notater fra intervjuet.

Det er frivillig å delta
Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan oppbevares og brukes dine opplysninger
Jeg vil bare bruke opplysningene om deg til formålene jeg har fortalt om i dette skrivet. Jeg behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- Det vil kun være undertegnede (student) og veileder ved behandlingsansvarlig institusjon som vil ha tilgang til opplysningene.
- For å sikre at ingen uvedkommende får tilgang til personopplysningene vil datamaterialet lagres som kryptert fil. Navn og andre kontaktopplysninger vil erstattes med en kode som vil lagres på egen navneliste adskilt fra øvrige data.

Deltakere i studiet vil ikke kunne gjenkjennes i publikasjon, da det kun er stilling og type selskap som eventuelt vil fremkomme.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?
Opplysningene slettes når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er 25.juni 2021.

Dine rettigheter
Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?
Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Sørøst-Norge har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Universitetet i Sørøst-Norge ved:
  Helena Holter Antonsen, tlf. 992 94 894, e-post: 231000@student.usn.no
  Dag Øivind Madsen, tlf. 31 00 87 32, e-post: dag.oivind.madsen@usn.no
- Vårt personvernombud: Paal Are Solberg, e-post: personvernombud@usn.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Dag Øivind Madsen (Forsker/veileder)

Helena Holter Antonsen

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *«Modenhetsmodell for compliancefunksjonen i norske verdipapirforetak»*, og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta i intervju
- ☐ at mine personopplysninger lagres etter prosjektslutt, til den bruk formålet med oppgaven beskriver.

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

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(Signert av prosjektdeltaker, dato)