

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management from the Nova School of Business and Economics.

THE IMPACT OF THE NEW EU WHISTLEBLOWER PROTECTION DIRECTIVE ON
THE ROLE OF WHISTLEBLOWERS IN PROACTIVE CRISIS MANAGEMENT

Including the individual contribution

WHISTLEBLOWING: THE IMPACT ON PROACTIVE CRISIS MANAGEMENT

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Abstract

Individual contribution:

Triggered by the Wirecard crisis, the timely implementation of the EU whistleblower directive, and lack of scientific studies, the author investigated the relationship between the disciplines of whistleblowing and proactive crisis management, as there may be a further reciprocal relationship between both fields. The author developed a concept to demonstrate the strategic value whistleblowers have in crisis management, namely how whistleblowers help organizations to reduce the surface of the triangle of ignorance in crisis management. This is possible as whistleblowers provide crisis managers with early and first-hand information about specific issues, helping organizations to better understand their current situation.

Group contribution:

The purpose of this study is to examine the impact of the new EU whistleblower directive on the role of whistleblowers in proactive crisis management. The authors concluded that if the EU directive comes into force in December 2021, the positive significance of whistleblowers in proactive crisis management will increase. This effect is argued to be achieved through an increase in whistleblower reports, as organizations are incentivized to set up whistleblowing arrangements while (potential) whistleblowers become empowered. The derived results contribute to the change of the perception of whistleblowers from a denunciator to an asset in organizations.

Keywords: Whistleblowing; regulation; crisis; crisis prevention; organizational misconduct; proactive crisis management; pre-crisis stage; stakeholder theory; warning sign detection

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DISCLAIMER

The present thesis “WHISTLEBLOWING: THE IMPACT ON PROACTIVE CRISIS MANAGEMENT” by Vincent M. Kohal consists of chapter 2.3, 4.1 and 4.2. Following the guidelines of a Work Project under the format of a Field Lab by NOVA SBE, this individual thesis is part of the directed research topic “THE IMPACT OF THE NEW EU WHISTLEBLOWER PROTECTION DIRECTIVE ON THE ROLE OF WHISTLEBLOWERS IN PROACTIVE CRISIS MANAGEMENT”. Therefore, this individual contribution complements the individual part of Lukas Bunge and the collective part of the work project. It is recommended to read the entire document with all parts.

1 Introduction*

“Whistleblowing is crucial to prevent and solve wrongdoing in organizations, creating benefits for individuals, companies, and society at large” (Mazzei and Ravazzani 2020, 179).

Facebook, Diesel gate, Pandora Papers - whistleblowers have played a significant role in most recent scandals and gained considerable media attention. In each of these cases, individuals may have spoken up but were silenced. Some more persistent individuals decided to speak up externally and hence became known whistleblowers. This form of acting is indispensable to prevent, detect and solve wrongdoing in organizations, as - in many cases - only people from the inside can discover misconduct (Vinten 2000). One piece of evidence might be the analysis performed by the Association of Certified Fraud Examiners (ACFE 2020), which for two decades has published in its Report to the Nation that about 40% of occupational fraud cases are discovered by an anonymous tip. If misconduct is not addressed early or poorly managed, such events can escalate into a crisis and harm all affected stakeholders. One recent example of such a crisis was the Wirecard case. The persistent whistleblower Pav Gill played the major role in uncovering the financial scandal around accounting fraud and money laundering at the German fintech (Giesen et al. 2021). Currently, claims for damages from shareholders amount to €14.3 billion and, moreover, the trust in several German authorities, the German share index (DAX) and Germany as a financial center altogether has been severely shattered (Scholte 2021). The Wirecard case became a catalyst for the urgent need to change current whistleblower

protection legislation and it created a sense of awareness that whistleblowing is an effective instrument to uncover legal violations. Politicians have acknowledged that legal protection of whistleblowers in the European Union (EU) is non-existent or highly fragmented. This resulted in the Whistleblower Directive ((EU) 2019/1937) (EU directive), which needs to be implemented into national law by December 17, 2021. It aims to achieve a uniform legal framework for the implementation of reporting systems and the protection of whistleblowers in the Member States.

Triggered by the Wirecard crisis, the timely implementation of the EU directive, and personal interest in crisis management (CM), the authors want to investigate the relationship between the disciplines of whistleblowing and CM, as there may be a further reciprocal relationship between the two fields. This has so far been largely unexplored academically (Demir 2013; Ionescu 2015). Even though both disciplines separately gained considerable attention (cf. for crisis management Coombs 2015; Coombs and Laufer 2018; Borodzicz 2005; Bundy et al. 2017; Devlin 2007; cf. for whistleblowing Bakken and Hærem 2021; Blöcker 2003; Near and Miceli 1995, 2016, 1985; Miceli, Near, and Dworkin 2008; Miceli and Near 1988, 2002), there is little research published on the possible synergies of whistleblowing in CM (cf. Morrison 2011; Alpaslan, Green, and Mitroff 2009; Hammel 2016; Demir 2013; Mazzei and Ravazzani 2020; Vinten 1993, 2000).

Based on a conceptual and inductive approach, the general objective of the present thesis is to assess the impact of the new EU directive on the role of whistleblowers in proactive crisis management (PCM). To complement this, this paper evaluates the effect of the concept of whistleblowing on the field of PCM. Another emerging subobjective is to assess whether the new EU directive would have strengthened the importance of whistleblower protection in the Wirecard crisis. The research objectives are guided by the following research questions and are to be answered within the scope of the present thesis:

Q 1: How does the EU whistleblower directive affect whistleblowing as a method for proactive crisis management?

Q 1.1: Can whistleblowing be a crisis prevention method and if so, how?

Q 1.2: What would've been the impact of the EU whistleblower directive on the Wirecard crisis?

The thesis consists of five parts. The first (I) part comprises the introduction with the presentation of the topic's social and practical relevance and scientific importance. This is followed by the objectives and research questions, including the delimitation. Part II provides the theoretical foundations and an explication of selected topic-specific pre-requisites, approaches, and theories. Within Part II, the first chapter outlines the Wirecard case and its key whistleblowers. Chapter two takes up whistleblowing and discusses the regulatory environment in the EU and Germany. Chapter three explains crises, CM, and methods in PCM and briefly outlines the idea of whistleblowing in CM. Part III elaborates on the methodological approach, which includes the theory and concepts of the empirical research. Part IV explicates the empirical study. Within Part IV, chapter one analyzes if whistleblowing affects PCM and discusses the empirical findings by elaborating a new CM concept, whereas chapter three investigates and discusses if the new EU directive would have strengthened the importance of whistleblowers protection in the Wirecard crisis. In chapter five, which is at the same time the title-giving part, the impact of the new EU directive on the role of whistleblowers in PCM will be discussed. For each chapter, the research question will be answered and a hypothesis will be formed. Part V begins with a summary of the paper, followed by a critical review and reflection. It concludes with a final remark and an outlook on possible areas for further research.

For certain content and theoretical concepts, which are adjacent to the topic of the paper but not explicitly considered, a delimitation is required. First, due to the breadth of the topic of crisis and CM, only the pre-crisis stage is covered, as the focus of this paper is the linkage of this

stage with the concept of whistleblowing, while the acute and post-crisis stages are briefly touched. Second, no in-depth legal assessment of the EU directive is conducted since the contents covered and the framework conditions of the directive are the most relevant aspects for the conducted evaluation. Third, the analysis of Wirecard does not include a deeper consideration of the quantification of economic damages the misconduct caused, or the analysis of the failure of control bodies, as these topics have already been discussed in scientific and legal analyses.

2 Theoretical foundations

This section is devoted to the theoretical foundation. First, the case of Wirecard will be elaborated. Then, a well-founded understanding of whistleblowing and CM will be created.

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2.2 Whistleblowing

The following chapters define the term whistleblowing, explain the phenomenon behind the word, and discuss the development of legal protection for whistleblowers.

2.2.1 Fundamentals of whistleblowing*

The communication behavior of employees can be audible or silent. With voice, as the audible behavior, the employee communicates opinions and ideas or doubts to resolve a current issue or increase organizational efficiency. In contrast, a silent employee deliberately withholds information. Somewhere between the two extremes is whistleblowing (Morrison 2011; Mazzei and Ravazzani 2020).

One of the most cited (Vetsch 2017; Mazzei and Ravazzani 2020; Miceli and Near 2002, 456) definition of whistleblowing was coined by Near and Miceli (1985, 4), which state that whistleblowing is “the disclosure by organization members (former or current) of illegal, immoral or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action”. Following the definition, whistleblowing is a potential recurring process containing four elements: the whistleblower, the act of blowing the whistle, the complaint receiver, and the organization. For this thesis it is worth to mentioning that neither the EU directive nor the German law give a precise definition of what whistleblowing is (The EU Parliament 2019; Wissenschaftlicher Dienst des Deutschen Bundestages 2019).

Whistleblowers can be divided into embryonic, passive, or active. Embryonic whistleblowers are deprived of their voice before they expose wrongdoing. Passive ones can come up, but only upon official request. Lastly, active whistleblowers report unlawful actions by their own efforts (Modesitt et al. 2015; Demir 2013). Which group the individual belongs to, depends on individual, socio-cultural and organizational factors (Miceli, Near, and Dworkin 2008). For example, an individual with a higher professional status tends to be an active whistleblower, as these can expect higher external support (Miceli and Near 1988). Furthermore, a whistleblower is an individual that blows primary the whistle based on altruistic motives (Bug and Beier 2009). Regardless of being a former or current organization member, a whistleblower exposes misconduct as the individual has not enough power to change the organization’s course of action on his own. In some cases, whistleblowers remain anonymous, especially if those individuals fear a high risk of retaliation (Near and Miceli 1985).

The act of blowing the whistle – a dissenting voice behavior – starts at the subjective evaluation of the alleged activity. If the alleged activity is in such a way inappropriate that it contradicts with the individuals own values, or of the organization, then the individual tends to inform

others. However, the act of informing depends on various general conditions that must be met beforehand (Near and Miceli 1985). A whistleblowing system is only effective if the organizational circumstances are so that the potential whistleblower feels trusted (degree of trust), acknowledged, heard, and safe from any personal harm, and can expect suitable actions from the complaint receiver / organization. Hence, ethical values and awareness must be internalized and institutionalized into decision-making throughout all hierarchical levels, and not only at the bottom (Ashforth and Anand 2003). Besides this informal implementation, organizations should also use a formal approaches through official arrangements such as whistleblower hotlines, suggestion systems, open-door policies, complaints procedures or work councils (Frandsen and Johansen 2017; Miceli, Near, and Dworkin 2008; Morrison 2011; Pinder and Harlos 2001; Mazzei, Butera, and Ravazzani 2020). These approaches can be aggregated as whistleblowing arrangements (Mazzei and Ravazzani 2020). Whistleblowing arrangements create a communication environment that fosters employee voice (Mazzei and Ravazzani 2020). An important note is that upward communication about issues or problems to superiors only works if the employee's degree of trust is high and such has greater confidence that the notified supervisor values upward interactions (Gaines 1980; Near and Miceli 1985). When deciding whether or not to blow the whistle, potential whistleblowers should be educated on where and how to raise the concern and know from whom they can get discrete and confidential advice for ethical dilemmas, uncertainties, or ambiguities. A potential person of contact could be either an internal or external ethics or compliance officer (Kolarska and Aldrich 1980; Ashforth and Anand 2003). Following the definition of whistleblowers being less powerful than their peers within the organization sets simultaneously another pre-requisite: The individual refuses to blow the whistle, if there is no powerful person within the organization, that would perceive the act illegal, immoral, or illegitimate as well. This reduces the whistleblower's degree of trust. Other factors are bad experiences of previous

whistleblowers or a big backlog of complaints (Near and Miceli 1985). Lastly, the individual characteristics of the whistleblower should be considered. Individuals with high moral reasoning tend to blow the whistle more often as well as employees with high self-esteem as they can expect to motivate others and be taken seriously (Kolarska and Aldrich 1980). Additionally, a stronger financial situation and established personal network may increase the decision to become a whistleblower (Near and Miceli 1985).

In terms of technical implementation Ratley (2012) argues that a variety of channels should be reachable from the outside and inside of the organization. As for communication channels, Ratley (2012) suggests implementing methods such as a telephone hotline, ombudsman, online web-forms, special e-mail address, and a dedicated postal mail address. The recently introduced ISO 37002:2021 standard provides further guidance for organizations to implement an effective whistleblowing management system.

If the requirements are met, the individual usually reports the wrongdoing to the internal complaint receiver, who can be an individual or a group of persons but should not be the immediate supervisor. An external independent party is also possible. However, whistleblowers tend to go public if the organization ignores, neglects, or covers up the misconduct or tries to silence the dissident voice. To avoid such occurrence, organizations can choose other options, such as evaluating and implementing measures to solve the reported issue or abandoning in case of strong evidence of falsified allegations (Miceli and Near 2002; Rothschild and Miethe 1999; Mazzei and Ravazzani 2020).

In connection to where whistleblower report their findings, three categories of complaint receivers were identified. From an organizational perspective, the first and preferred option is to have an internal entity within the organization responsible for receiving complaints. From a whistleblower's perspective, this is called “internal reporting”. The second option are entities outside the organization’s scope, namely competent authorities. This is called “external

reporting”. The final and most critical option for an organization is when the public becomes the complaint receiver, which is also referred to as "a whistleblower goes public" or public disclosure (Near and Miceli 1985). Depending which path whistleblowers choose to report, they may or may not be protected against reprisals. This and the legal development of whistleblower protection in general will be discussed in the next chapter.

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2.3 Crisis management

In the following chapters, the research area of CM is introduced, describing crisis types, management practices, and PCM in detail.

2.3.1 Crisis types and characteristics

Neither the concept nor the definition of a crisis has found a commonly accepted description among researchers (see Appendix 10 for definitional demarcation between emergencies and disasters; see Appendix 11 for various crisis definitions). This thesis defines a corporate crisis as a negative “event perceived by managers and stakeholders as highly salient, unexpected, and potentially disruptive [, which] can threaten an organization’s goals and have profound implications for its relationships with stakeholders” (Bundy et al. 2017, 1662). Explicitly, crises (have the potential to) harm and threaten the entire organization and their stakeholders, while stakeholders’ different needs and demands may conflict with each other (Bundy et al. 2017; Coombs 2015). The characteristics of a crisis can be divided into certain types and are summarized in

Appendix 12 (Pearson and Clair 1998; Bundy et al. 2017; Coombs 2015). However, special

attention is devoted to the two possible development patterns of crises, namely sudden and smoldering crisis types, as this will be relevant in the following chapters. Sudden crises mutate due to external shocks that require sudden adjustment. In contrast, smoldering crises result from a slow cumulative adjustment that tips into change at a threshold level. As for smoldering crises, negative effects increase over time until they bring the company into existential difficulties (Töpfer 2014). Examples are product defects, financial problems, organizational misconducts, and whistleblowing (Coombs 2015; Devlin 2007; James and Wooten 2004). According to the Institute of Crisis Management (2020) more than 70% of registered crises have been smoldering crises in the last 20 years. Sudden crises are those whose occurrence is not foreseeable or foreseen and abruptly put the company in a significant predicament that causes great damages (Töpfer 2014). Examples are operational disruptions from (natural) disasters or malicious acts (Coombs 2015; Devlin 2007). A detailed comparison can be found in Appendix 13. Lastly, a brief introduction to the crisis stages helps to better understand CM in the next chapter. The life cycle of a crisis can be divided into three stages: pre-crisis, acute-crisis, and post-crisis stage (Coombs 2015; Devlin 2007). Within the pre-crisis stage, the organization identifies a critical situation by receiving a warning. The warning is usually inside the organization and not yet visible to the public. The crisis transits to the acute-crisis stage as soon as the event becomes visible outside and inside the organization. Within this stage the crisis causes the greatest harm or damage to the organization. The moment after the crisis is contained is called the post-crisis stage. Focus of the thesis is primarily on the first stage of a crisis. However, to get a holistic picture of Coomb's CM life cycle, a brief overview of the management practices in each stage will be presented in the next chapter.

2.3.2 Crisis management stages

CM is an ongoing process that “seeks to prevent or lessen the negative outcomes of a crisis and thereby protect the organization, stakeholders, and industry from harm” (Coombs 2015, 21).

Ideally, this process begins before a negative event becomes relevant (Gottlieb 2021). Coombs developed various management practices for each crisis stage, also known as the CM life cycle (see Appendix 14). However, Jaques (2007) emphasized that the stages should not be seen as a sequence but as “clusters” of related and integrated disciplines. In other words, the individual stages can overlap or take place simultaneously. Coombs (2015) mentions three sub-stages within the pre-crisis stage: signal detection, prevention and crisis preparation. Organizations should engage on PCM to prevent crises from occurring, as the damage in early stages is little to zero and easier to manage (cf. Coombs 2015; Borodzicz 2005; Devlin 2007; Gonzalez-Herrero and Pratt 1995; Kash and Darling 1998). Therefore, organizations should scan the environment for early warning signs or red flags (cf. Appendix 1) that indicate a potentially emerging crisis. Once warning signs are detected, preventive actions must be taken. The disciplines issue, risk and reputation management as well as scenario planning provide measures to prevent moving crises to the acute stage (Coombs 2015) (Appendix 16).

In terms of crisis preparation, organizations can use various management practices, including a periodic risk assessment to identify most likely and higher impact risks that cannot be completely avoided; forming a crisis management team; establishing and testing crisis management procedures; or providing training / crisis simulations / guidance for stakeholders (cf. Coombs 2015, chap. 5 and 6; Gottlieb 2021; Jaques 2007).

The moment a (potential) crisis evolves into a full-blown crisis due to a triggering event marks the beginning of the acute-crisis stage (see Appendix 15). This stage consists of two clusters, namely crisis recognition and containment. People within the organization must acknowledge that the elephant in the room is no longer ignorable. They need to create a sense of urgency to call high-level attention to the event. This is also known as crisis recognition (Coombs 2015). Within crisis containment, which aims to reduce reputational damage, economic loss, and legal liability (Gottlieb 2021), Devlin’s (2007) CM approach can be considered (Appendix 17).

If the CM team believes the crisis is under control, resolved, or deemed to be over, the organization returns to normal business operations. However, crisis managers need to continue to monitor the issues related to the crisis, evaluate the crisis containment efforts, and should finally conclude lessons learned to gain economies of learning for similar events in the future (Besanko et al. 2017; Coombs 2015; Gottlieb 2021) (see Appendix 15). Since this thesis focuses on the pre-crisis stage, the next chapter discusses PCM in greater detail.

2.3.3 Mechanisms of proactive crisis management (PCM)

PCM “is a component of a corporate management system that aims to apply a range of strategies for avoiding or preventing crisis situations” (Mazaraki and Kasianova 2015, 44). Mitroff and Alpaslan (2013) analyzed a sample of Fortune 1000 companies and found a positive correlation between successful CM outcomes and PCM practices, underlining the importance of such practice. Many mechanisms of PCM can be derived from Griffin’s (2014) risk life cycle (see Appendix 15). This includes the “crisis-sensing mechanism” that scans an organization’s external and internal environment to detect crisis warning signs. Nevertheless, not all crises emit warning signals or are preventable (Devlin 2007; Coombs 2015). In fact, smoldering crises emit warning signals, whereas sudden crises usually do not (Töpfer 2014; Hülsmann 2005; Vetsch 2017) (chapter 2.3.1). Once identified, warning signals are collected, analyzed, and monitored for further development. This is important since the organizations need to keep track of the most likely ones to become a crisis (Coombs 2015; Kash and Darling 1998; Griffin 2014; Gottlieb 2021). According to Coombs (2015), crisis managers have various options to gather information, such as interviews, surveys, or content analysis. Appendix 18 offers a more comprehensive list of potential crisis sources to monitor. The stand-alone disciplines issue, reputation and risk management actively use signal detection and information gathering and with that, these clusters overlap in large parts (Jaques 2007; Griffin 2014; Kash and Darling 1998). However, Coombs (2015) and Jaques (2007) did not mention – intentionally or

unintentionally – whistleblowing as a potential source of information (chapter 2.2.1). Whistleblowing is a form of employee voice and can therefore influence the reciprocal relationship between the organization and its employees (Puri and Borok 2002). From a broader perspective, an organization has several stakeholders, all of whom interact with each other, and therefore, stakeholder management needs to be considered in PCM. As crises are perceptual, the perceptions of affected stakeholders (cf. Appendix 1) influence the organization to define the event as a crisis or not (Coombs 2015). Stakeholders hold significant power in influencing an organization's behavior during an extraordinary event because they can be prompted to act by the issue (Diers-Lawson 2021). A useful model to incorporate stakeholders in PCM can be found in corporate governance (cf. Appendix 1). Alpaslan, Green and Mitroff (2009) proposed to follow a stakeholder model of corporate governance instead of the traditional shareholder model. The shareholder theory focuses on maximizing the shareholder value. In contrast, the stakeholder theory puts the interests of any group or individual in center, who can influence or get influenced by the organization. Scholars concluded that the ability to effectively prevent or respond to a crisis depends on the knowledge of its stakeholders' behavior during a crisis (cf. Alpaslan, Green, and Mitroff 2009, 39; Pearson and Clair 1998). In specific, scholars favor the stakeholder theory as it considers the individual claims and behaviors of all stakeholders; systematically presents how and why stakeholders affect corporate behavior; creates a culture of trust and beneficial relationships with stakeholders; and entails a framework on how to balance simultaneous needs and claims of multiple stakeholders while giving less powerful stakeholders a voice (Alpaslan, Green, and Mitroff 2009). Furthermore, sufficient and effective early warning sign detection works only if the organization actively strives for good stakeholder engagement (Griffin 2014). Hence, crisis managers need to identify all relevant stakeholders, including their interests, claims and concerns, and involve them in crisis prevention and response. One powerful stakeholder are employees, as their work is important for the

organization's economic success and provides relevant information through various channels before, during or after a crisis (Kent and Zunker 2017; Welch 2011; Gottlieb 2021; Bakken and Hærem 2021). Furthermore, employees are active ambassadors for the organization during a crisis and initiate internal and external communication as they are emotionally connected to the event (Johansen, et al. 2012; Diers-Lawson 2021). This creates an urgency to involve such stakeholders, as they are more willing to make sacrifices, and therefore, harder to "manage" (Diers-Lawson 2021). In sum, involving all affected stakeholders leads managers to create a more neutral, realistic, and comprehensive picture of the organization's environment, which allows them to increase early signal detection, information gathering and interpretation of early warning signals. Further results of a PCM based on the stakeholder theory could be minimal downtime, and effective containment of damage (Alpaslan, Green, and Mitroff 2009). Lastly, various 'hard' and 'soft' interventions within an organization can help to prevent crises from occurring. One 'hard' intervention to highlight is compliance. Knowledge of and compliance with legal, regulatory, and normative and contractual requirements is the starting point for an organization's safety-specific and risk-adjusted design. Compliance management has the task of knowing these requirements in their current form as well as the relevant developments, advising employees on the subject of compliance and ensuring that compliance requirements are met, i.e., legal and contractual conformity as well as adherence to standards and regulations (Müller 2015; Bayrak et al. 2012). Therefore, a crisis-preventive effect can be assumed for compliance programs (cf. Hammel 2016; Griffin 2014; Müller 2015; Schnatterly 2003). 'Soft' interventions can be situational awareness training, educational training, and corporate social responsibility (e.g., corporate citizenship). They must require a high level of acceptance and a positive corporate culture to be able to unfold their preventive effect (Bussmann et al. 2010; Griffin 2014). Hence, raising awareness for implemented standards, policies, or codes of conduct and promoting corporate citizenships helps the organization to

increase stakeholder engagement and prevents organizational risks “by creating a positive, mutually beneficial and listening environment both within the organization and between the organization [...]” (Griffin 2014, 120). This is of particular importance when addressing whistleblowing in the context of CM.

2.3.4 Whistleblowing in crisis management

Reviewing known crises where whistleblowers had a major role, it becomes apparent that whistleblowers have the power to change the course and outcome of events, individuals, and strategic focus of large organizations. Therefore researchers argue that whistleblowers should get significant attention in the context of CM (Demir 2013; Mazzei and Ravazzani 2020). When a whistleblower decides to report the alleged organizational misconduct outside of the organizational body, and regulators, media, or others exploit the moment of organizational vulnerability to gain access to the critical information, whistleblowing becomes a crisis trigger from the CM perspective (Demir 2013; Barton 1994). However, whistleblowing could be a useful tool for detecting warning signs to prevent the escalation of crises when they are still in an early stage and being processed internally (Frandsen and Johansen 2017; Demir 2013; Mitroff, et al. 1988). If whistleblowing occurs, the affected organization can either ignore the reporting, which could transform an internal report to an external crisis, respond to the report and solve the problem, or abandon if accusations are false and invalid (Mazzei and Ravazzani 2020). From a CM perspective, only the last two are reasonable. As discussed in chapter 2.3.3, proper crisis prevention and response require the involvement of all stakeholders as they can add their perspective and knowledge and share valuable information (Alpaslan, Green, and Mitroff 2009; Diers-Lawson 2021). Hereby, whistleblowers can play a major role in sharing valuable information and should be considered key stakeholders for effective CM (cf. Miceli and Near 2002). An examination of the impact will be part of chapter 4.1, but the research design will first be explained.

3 Research design*

The following chapter describes the conducted research and why the given methodology was chosen and applied to the underlying research question(s). The thesis explores the developing concept of PCM and whistleblowing as an integrated process to prevent crises. Further, the thesis evaluates the impact of the new EU directive on the Wirecard crisis and thus on CM.

Depending on how much is known about the topic in current research and the purpose of the research area, there are three types of possible research designs, each of them serving a different purpose: the exploratory, the descriptive, and the explanatory research design (Robson and McCartan 2016; Blumberg, Cooper, and Schindler 2005). This research thesis used an exploratory research design as it does not aim to provide a final conclusion on the research question. It rather explores the research topic by evaluating the possible synergies of PCM and whistleblowing (Boru 2018). Due to the lack of scientific studies, it is recommended to follow an inductive research approach (Elo and Kyngäs 2008). Inductive research is characterized by the search for patterns from observations and the subsequent development of theories and explanations (Woods 2006). The procedure is as follows: first, defining the research topic, then observing the issue, and finally collecting data. After determining a hypothesis, theoretical ideas and concepts emerge. For an exploratory research design and inductive research approach, a qualitative analysis is deemed appropriate for the empirical part of the thesis and will be described further in the following chapter (Robson and McCartan 2016).

3.1 Qualitative research

Expert interviews are one of the widely used research methods within qualitative research (Silverman 2020; Flick, von Kardoff, and Steinke 2004). The experts for the present thesis were selected based on their knowledge in one or more of the following fields: CM, whistleblowing, the EU directive, and the Wirecard case. Ten experts were interviewed. Information on their (professional) background can be found in Appendix 20. The interviews were conducted in a

semi-structured format. In such format, the dialogue between the interviewer and interviewee is “guided by a flexible interview protocol and supplemented by follow-up questions, [...] and comments” (DeJonckheere and Vaughn 2019, 1). The interview format can be reviewed in Appendix 21. The chosen approach provides flexibility in tailoring the questions to the respondent's area of expertise and gives them the opportunity to address issues that they feel are important (Gläser and Laudel 2010; Longhurst 2016). This was especially important since the covered topics were rather specific and not every expert was knowledgeable on all interview fields. The interviews lasted approximately one hour and were conducted via the internet through MS Teams. The experts were informed that the interviews will be video-recorded, and permission to do so was obtained from all experts beforehand. The interview comprised the four topics mentioned above: CM, whistleblowing, the new EU directive, and the Wirecard case. In preparation for the qualitative content analysis, all conducted expert interviews were transcribed using the f4transkript tool by Dr. Dresing and Pehl (2018). The interviews were cleared of paraverbal utterances.

3.2 Qualitative content analysis of the expert interviews

The approach of the qualitative content analysis was chosen for the data analysis and interpretation of the expert interviews. The different steps of the analysis were: a) the data extraction, b) the data preparation and c) the data evaluation (Appendix 19) (Gläser and Laudel 2010). In the first step the statements by the experts were extracted. From the preliminary theoretical considerations (Chapter 2) a search grid in the form of a code system was constructed (Appendix 22). Codes are short linguistic keywords or identifiers derived from the theoretical part (deductive code) and refer to aspects of a text's meaning. The code system could be changed during the data extraction, if information emerged in the text that may be relevant for answering the research question, but for which a suitable code has not yet been found (inductive code) (Mayring and Gahleitner 2019). Fifteen deductive codes were generated prior

to the evaluation of the interview. Five inductive codes followed during the process of analyzing the data.

The next step in the content analysis was to prepare the data by summarizing scattered information, eliminating redundancies, and correcting transcription errors. The aim was to improve the data quality (Gläser and Laudel 2010). In preparation for data analysis, the extracted information from each interview were sorted based on the specified codes using the qualitative data analysis software MAXQDA. The gathered information of each code from all interviews were then summarized. Information was summarized if the experts made similar or identical statements in different places within an interview.

The final step was to evaluate the data. First, a descriptive analysis was performed, in which the collected and summarized results were described (Kolb 2008). Then, the results were put into context with the information gathered from desk research on CM, whistleblowing, the EU directive, and Wirecard. Third, findings were critically discussed and reflected. Hypotheses were then derived, and causalities from the extracted data were used to answer the research questions (Glaser 1978). The next step is to put the theoretical concepts into practice to derive the empirical results.

4 Empirical results and discussion

In this chapter, the empirical statements and results of the conducted empirical study are described and discussed.

4.1 Whistleblowing: The impact on proactive crisis management

To investigate the impact of whistleblowing in PCM, experts were asked about their understanding of CM in organizations, which they referred to as the discipline that focuses on preparing for, responding to, and recovering from a crisis. As for preparation, several experts stated that it includes identifying all risks upfront, rating them as to what the most probable

would be, ensuring that the people are properly trained and that the activation process is clear for what constitutes a potential crisis as well as types of crises for the organization. Surprisingly, the term PCM, which represents the just mentioned aspects, is not commonly used by the experts. Furthermore, few experts even denied the principle of PCM or argued that this is not part of CM in the conventional sense but rather part of each individual organizational unit. Each functional unit must deal with its incidents, irregularities, or problems first, but should be supported by various cross-cutting functions such as business continuity or risk management. If the functional unit is not capable of handling the issue on its own, it should be then raised across the hierarchical and vertical chain of the organization.

When experts were asked about the potential synergies of whistleblowing and PCM, nearly everyone agreed that to some extent whistleblowing can be a method to detect potential disruptive events and also to prevent crises. They argued that whistleblowing grants decision-makers more accurate and potentially critical information, leading to the ability to react quicker and hence prevent crises. However, experts linked the influence of whistleblowing in crisis prevention to several parameters. First, they differentiated between crisis types. They constituted that whistleblowing is mainly suitable (in the sense of crisis prevention) for smoldering crises, as these are often due to human error. For sudden crises, experts pointed out the limited applicability of whistleblowing, as these events get usually triggered due to external factors, in which reporting a potential misconduct would not help much. Second, they argued that a certain cultural recognition and appreciation of whistleblowing must be implemented beforehand. Few experts stated that implementing whistleblowing systems may sometimes be not desired, as some executives of organizations do not want to get informed on all grievances within their organization. Third, the results of the interviews indicated that there need to be frequent triage meetings with an interdisciplinary team that discusses the recent whistleblower reports. The benefit would be to avoid silo thinking and increase containment efforts. However,

some experts stressed the right balance between need to know and need to share. They argued that a large group cannot maintain the confidentiality of the report and the whistleblower's anonymity.

In terms of how effective whistleblowing in PCM is, most experts could not quantify the effectiveness. They argued that it is difficult to gather high quality data sets about organizational crises where whistleblowers played a major role in detecting, preventing, or reducing the impact of crises. However, experts provided non-quantifiable estimates. The estimation of a positive effect ranges from minor and non-significant to a high value-adding method in PCM. The most common comment was that whistleblowing is one of the most effective means of uncovering wrongdoing and thus can be used to prevent potential crises. If the organization is informed on a potential misconduct within its boundaries by a whistleblower at an early stage, it can get in front of the situation and take over the strategic control, investigate as well as contain the issue and report to relevant stakeholders. According to the interviewees, this could safeguard an organization from high legal and financial liabilities. Hence, according to the experts, whistleblowing is much more effective in the pre-crisis phase than during the acute or post-crisis phase.

If all else being equal, the number of whistleblower reports helps the organization develop a better understanding of its current situation, especially about the employees' morale. According to the experts, when the employee morale is low, more whistleblower reports are received. Furthermore, respondents believed that the number of whistleblower reports on a given issue in a pre-determined time period is a good indicator of whether the organization has an ongoing problem of which it is currently unaware. By displaying the reports on a heat map, the organization can identify the current problem areas early and predict where potential conflicts may develop. Hence, experts argued that the higher the volume of reports on a certain topic is,

the higher the probability that the organization initiates efforts to prevent the event from evolving into a crisis.

Again, experts mentioned certain parameters that influence the effectiveness of whistleblowing in PCM. These parameters can be clustered into the four elements of whistleblowing (chapter 2.2.1). Addressing the element “whistleblower”, the objectivity and quality of the whistleblower report is a factor with high impact, as some experts stated that many of the cases were unfounded or minor things that should have been handled directly in the workplace. Furthermore, the risk of wrongful allegation is present, and this is called “poisonous pen”, meaning when the alleged whistleblower is using the whistleblowing system for the personal benefit or to denounce others.

For the second element, “act of blowing the whistle”, the interviewees highlighted the importance of a high-quality implementation of whistleblowing arrangements. The results revealed that three main problems keep individuals from blowing the whistle: First, potential whistleblowers are afraid of retaliation in any form. Second, potential whistleblowers do not know where and how to report. Third, whistleblowers have the feeling that reporting will not do any difference. When organizations would address these three important findings, the act of blowing the whistle would become more recognized and impactful. To complement this, useful pre-requisites for successful whistleblowing systems are presented in chapter 2.2.1. Another important parameter for the effectiveness of whistleblowing in PCM is that it also depends on where the act of blowing the whistle takes place. The interviewees argued that if the whistleblower decides to communicate the information externally, i.e., outside of the organizations’ boundaries, the whistleblower may become a crisis trigger. The organization no longer has an information advantage and cannot contain the critical event in its initial phase as external stakeholders such as the authorities, media, or public have already been informed.

Conversely, if the whistleblower decides to just report internally, this action could help the organization to avoid a potential crisis-triggering event.

For the third element, “complaint receiver”, experts reasoned that the person or group that receives the report can significantly influence a critical event’s scope and potential future development - intentionally or unintentionally. First, it is questionable how neutral and independent the complaint receiver is. Preferably, the complaint receiver evaluates the report neutrally and without biases, ideally based on the stakeholder theory (chapter 2.3.3). Second, each whistleblowing case should be taken seriously but assessed through a triage of importance for further investigation. Third, the complaint receiver needs to be knowledgeable in various fields to understand the various subjects of the reports. Otherwise, the complaint receivers would unintentionally misunderstand or oversee important reports. Lastly, experts suggested that complaint receivers need to be independent of top management and preferably have a direct (second) line to the board members, as allegations may be directed at top management.

4.2 Discussion of the results

In order to answer the research sub-question of whether whistleblowing can be a crisis prevention method and, if so, how, key contents of the theoretical foundations and empirical findings in chapter 4.1 were used. Since an inductive research approach was used, the hypothesis was derived based on the empirical results: If whistleblowing arrangements are properly implemented, whistleblowing can be considered as a powerful method to detect and prevent potential crises, and its effectiveness on PCM is stated to be positive.

However, the results need to be critically reviewed. There are some divergences of experts’ opinions, which was also reflected in the literature review. For example, a quantitative study conducted by Hammel (2016) found out that whistleblowing does not have a crisis-preventive character, but its absence could certainly influence crisis susceptibility. Nevertheless, Hammel believed that a larger sample size of organizational crises could have made whistleblowing a

significant result in crisis prevention. Other researchers argued more favorably and stated that whistleblowing is a watchdog “for society vis-à-vis the unethical behaviors of organizations. It is a way to save lives, [...] stop corruption, waste, and exploitation” (Ionescu 2015, 54). From a macroeconomic perspective, whistleblowing is considered an important economic and societal factor for an economy (Kolesnik 2016). For example, Helle Stensbak noted that Norway could save more than \$1 billion a year if whistleblowing systems were put in place and reports were processed promptly (Bakken and Hærem 2021). On a microeconomic perspective, Stubben and Welch (2018) found that a 10% increase in whistleblower reports leads to a 2% decrease in government fines and a 1% decrease in lawsuits filed against the organization. They argued that this could result from whistleblowing arrangements that provide management with valuable and actionable information about potential wrongdoings within the organization. The statements of the experts are supported with these arguments.

The findings of the present work provide new insights into the relationship between whistleblowing and CM. In fact, this work contributes to current research by proposing a new concept that shows managers the strategic value of whistleblowing in (P)CM:

How whistleblowers help organizations reduce the surface of the triangle of ignorance in crisis management

In Figure 1, the author presents the concept of crisis development. It was developed while analyzing the expert interviews. The blue line shows the development of an organizational crisis over time. The left y-axis indicates the degree of control an organization maintains over the crisis, whereas the right y-axis represents the degree of impact the crisis has on the organization.

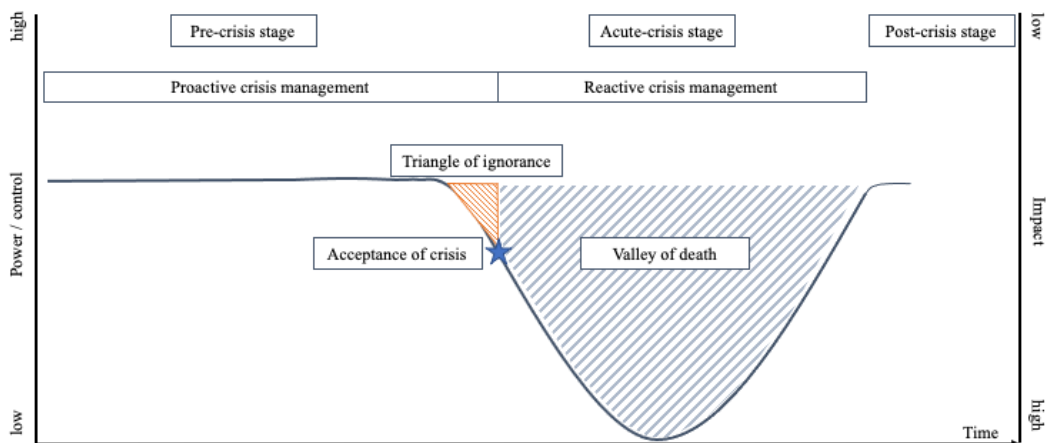


Figure 1: The concept of crisis development without whistleblowing

The triangle of ignorance represents the time an organization refuses willingly or unwillingly to acknowledge the existence of a crisis. Therefore, the greater the surface area of the triangle is, the more impactful a crisis can get, and the greater potential damages will be, and the less power the organization will have to steer the critical situation in the desired direction. The organization “exits” the triangle of ignorance as soon as it recognizes and accepts the crisis. Closely tied to the triangle of ignorance and within the acute-crisis stage is what experts name the “valley of death”, which represents the time the organization is exposed to the crisis. At the valley’s lowest point, the ability to control the situation is low, while the degree of impact for further damages is high. The faster an organization gets out of the valley of death, the lower the damage. How deep the valley can get also depends on how large the surface of the triangle of ignorance is. As can be depicted from Figure 1, the triangle of ignorance is already part of the valley of death. This can be explained by the fact that the organization is not able to control the event since it was not able to recognize and accept it yet. At the same time, the event can develop undetected into a growing crisis and negatively impact the organization. Therefore, the organization must acknowledge the importance of minimizing the surface of the triangle of ignorance. As the empirical results indicated, an active contributor to minimize or eliminate the surface is a whistleblower. Figure 2 shows the concept of what the author calls “the impact of whistleblowing on the triangle of ignorance in crisis management”. Obtaining timely and first-

hand information helps organizations to understand their current situation and monitor their environment for potential early warning signs. Consequently, the time needed for an organization to recognize and accept a crisis is shortened (see Figure 2). This, in turn, means that the organization does not descend deeper into the valley of death, as it minimizes the surface of the triangle of ignorance. This subsequently would allow organizations to steer against the adverse development of a crisis faster. If the whistleblower report is received at an early stage of a potential crises (Figure 2), the surface of the triangle of ignorance and the valley of death could be reduced to the minimum as the organization sets up appropriate countermeasures to prevent an event from developing into a crisis in the first place.

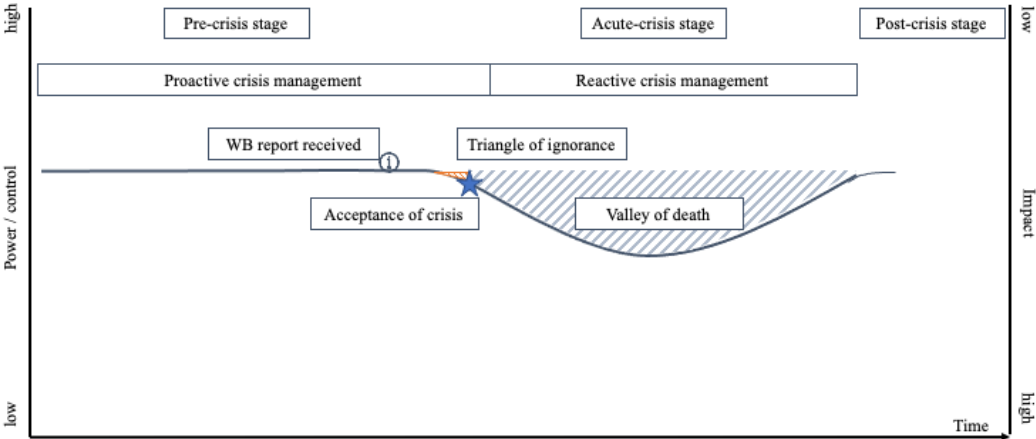


Figure 2: The impact of whistleblowing on the triangle of ignorance in crisis management

In terms of the parameters that influence whistleblowing to reduce the area of the triangle of ignorance, the experts mentioned that whistleblowing is specifically suitable for smoldering crises. Although, experts did not indicate whether smoldering or sudden crises occur more often. This, however, is particularly important as it would diminish or enhance the significance of whistleblowing in PCM. Highlighted in chapter 2.3.1, the vast majority of crises are neither due to external, sudden shocks such as plane crashes or fires but due to slow cumulative adjustment that unfolds their full impact at a certain level (Millar 2004; Hammel 2016). These crises are often related to “questionable, illegal, or unethical activity by someone within [or outside] the organization frequently involving other members of the organization” (Millar 2004,

24). Unsurprisingly, the inherent characteristics of such crises coincide with the thesis' definition of whistleblowing: "the disclosure by organization members [...] of illegal, immoral or illegitimate practices [...]" (Near and Miceli 1985, 4).

Another aspect is that the experts only briefly mentioned the importance of organization's cultural recognition and appreciation of whistleblowing. Cultural and social factors arguably play a far more significant role in whistleblowing than anticipated by given results (Bussmann et al. 2010). In fact, a reciprocal interaction can be established. From a cultural and social perspective, the findings in 2.2.1 and 4.1 should be highlighted here. Among the important ones are an open and trusted organizational climate; a mutual open (upward) communication culture; and a management style that understands the importance of whistleblowing and encourages to report wrongdoings (Mazzei and Ravazzani 2020; Mazzei, Butera, and Ravazzani 2020; Gottlieb 2021). For the implementation process and therefore the cultural appreciation of whistleblowing arrangements, Mazzei and Ravazzani (2020) point out that a proactive, bottom-up implementation by the organization is much more preferred than a reactive statutory approach, which mainly originates from external pressure. A voluntary implementation reduces the risk of external whistleblowing and discourages future wrongdoings and hence prevents crises (Near and Miceli 1995). Lastly, professional ethics training for employees should be provided as studies have shown a positive correlation between ethics and whistleblowing (Demir 2013). In turn, the whistleblowing system itself is a strategic tool to promote, improve and strengthen the organization's voice communication and stakeholder relationship as the present results have shown (Frandsen and Johansen 2017; Mazzei and Ravazzani 2020; Diers-Lawson 2021). Having a whistleblowing system implemented emphasizes the idea of having a choice. If implemented, an employee can choose between various reporting channels. A recent study found that having choices makes people feel more empowered, independent and confident to express their opinions, while being able to control their environment (Nanakdewa et al.

2021a). Thus, having control is a precondition for greater ownership and belonging at work (Nanakdewa et al. 2021b).

When the experts referred to the importance of the number of whistleblower reports, some stated that if the employees' morale is low, more whistleblower reports are recorded. This statement could not be justified by the existing literature. Researchers studied the moral character of whistleblowers and concluded that individuals with high morale tend to be more likely to report potential misconduct. Thus, the higher the morale of employees, the more likely it is that a greater number of whistleblower reports will be made (Dungan, et al. 2019; Helzer, et al. 2018; Kolarska and Aldrich 1980). Another parameter of interest is the aspect of blowing the whistle internally first. The positive aspects of whistleblowing emphasized by the experts have some great similarities with a well-known framework in crisis communication: the stealing thunder strategy. Lee (2020) argues that instead of letting the external world create a narrative about a current event affecting an organization, the organization itself can steal the thunder by taking control and telling their own story in an accurate and timely manner. However, with regards to the "steal the thunder strategy", organizations need to learn about a "possible" crisis before the external world is informed (Lee 2020). The key here is to gain information advantage, which can be satisfied by an internal whistleblower report as real-life examples have shown: the car manufacturer Nissan Motor Co. received once a whistleblower report about a potential misconduct by the company's Representative Director and Chairman. Nissan investigated the matter and informed relevant stakeholders. In this case, Nissan proactively shaped the narrative around the crisis and saved itself from further negative implications (Coombs 2018). This case is only one of many, in which whistleblowers helped organizations to limit the surface of the triangle of ignorance of a crisis. In conclusion, whistleblowing arrangements are a vital and cost-effective tool of (P)CM and an important managerial strategy that every crisis manager should consider.

4.3 *This chapter is not part of the individual or group contribution*

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4.5 *The impact of the new EU whistleblower protection directive on the role of whistleblowers in proactive crisis management**

The thesis title indicates the general aim of the empirical study, which is to assess the impact of the new EU directive on the role of whistleblowers in PCM. The results of the analyses in chapters 4.2 and 4.4 were used to answer the superordinate research question of how the EU directive affects whistleblowing as a method for PCM. In chapter 4.2 it is concluded that whistleblowing if reported internally, can be a low-cost management tool for reducing the surface of the triangle of ignorance in CM and thus lessen or avoid the “valley of death” of a crisis. Chapter 4.4 argues that the EU directive could have positively influenced the Wirecard case to a certain degree but could most likely not have prevented the crisis entirely. As described previously, the directive would have offered this potential by leading to earlier detection of Wirecard’s shortcomings by establishing clear reporting structures and protection mechanisms for whistleblowers and, based on this, an increased willingness to blow the whistle.

Following the inductive approach, the authors concluded that, based on previous findings, whistleblowers’ significance in PCM will increase due to the new EU directive. Consequently, the following hypothesis is derived: If the EU directive comes into force, the positive significance of whistleblowers in PCM will increase. In fact, four main arguments must be highlighted to understand the authors reasoning:

First, and most obviously, the EU directive improves PCM by forcing organizations to implement whistleblowing arrangements. Organizations that have intentionally or unintentionally not taken any action so far must implement such a system due to Articles 7, 8, 9, and 13 of the EU directive. Thus, crisis managers will have a new source of information available to detect potential early warning signals. However, the authors emphasize that

organizations should rather not follow a reactive and statutory approach. Instead, organizations should ideally proactively implement whistleblowing systems and not wait until the whistleblower protection law comes into force, as studies have concluded that a proactive approach is much more effective (Mazzei and Ravazzani 2020).

Second, the EU directive indirectly improves PCM because it gives whistleblowers the opportunity to directly contact competent external authorities (designated by the Member States). Therefore, whistleblowers can also become potential crisis triggers since, from the moment of external reporting, the organization is no longer in complete control over the following events. Due to this, organizations are indirectly incentivized to fix potential internal shortcomings and create a whistleblowing-promoting environment, where employees report internally first instead of going directly towards external competent authorities or even the public. Additionally, organizations must strive for a cultural recognition and appreciation of whistleblowing, as highlighted in chapter 4.2. Moreover, the expanded concept of whistleblowers and personal scope of application of the EU directive supports the further utilization of whistleblowing (Articles 3 and 4). The directive does not only apply to (former) employees but also to future employees, subcontractors, or volunteers. This broader scope of application and the improved protection of a larger group of people contributes to an increasing number of people who can and want to file a report. It thus potentially leads to an increased number of reports.

Third, the new directive will empower individuals to blow the whistle. When properly implemented, organizations create a participative environment where whistleblowers are recognized and valued. This, in turn, helps to overcome the current issues of why potential whistleblowers do not speak up. The findings in chapter 4.1 showed that potential whistleblowers are afraid of retaliation. The new EU directive prohibits retaliation in any form (Article 19). Another aspect is that the directive obliges organizations to provide sufficient

guidance on where and how to report a potential breach. This would solve the second problem; individuals often do not know how and where to report. Finally, the EU directive would overcome the last issue, namely that potential whistleblowers have the feeling that a report would not change the course of the action of an organization. By law, the organization must now take diligent follow-up measures and provide feedback to the reporting person within three months about the actions taken and the results. Together, the directive indirectly empowers whistleblowing by addressing the whistleblowers' core issues (see chapter 2.2.1). Therefore, encouraging employees to report alleged organizational violations increases the number of whistleblowers, as the findings in chapter 4.3 indicated. An increased number of whistleblower reports suggests that the organization has a more serious problem of which it is currently unaware. Subsequently, the increased number of reports increases information flow and could lead to a higher probability of the organization's efforts to prevent the event from evolving into a crisis.

Fourth, depending on the type and manner of the national implementation, the defined penalties may be a driver to operate whistleblowing systems proactively and encouragingly by creating transparent structures and a whistleblowing promoting environment. For instance, the German draft of the HinSchG uses a fixed amount of €100,000 to penalize companies violating the Act. This amount is not based on the company's annual revenue or other financial metrics. Hence, this figure can deter smaller companies, such as small and medium-sized enterprises, and thus incentivize them to implement and operate whistleblowing systems. However, the penalization amount offers only limited dissuasive effects for larger enterprises. As several experts suggested, this could be changed when applying a revenue-based penalization.

Based on the preceding argumentations, the EU directive is considered as the starting point of a new whistleblowing rationale in Europe. The authors believe that the longstanding perception of a whistleblower as a denunciator is changing towards a value-adding entity. Considered from

a more progressive crisis prevention perspective, whistleblowers are understood as a valuable asset within organizations and an advantage to detect early warning signs to prevent issues from developing into a crisis. Hence, whistleblowing arrangements become more utilized as a tool. This shift is accompanied by further frameworks, such as the ISO 37002, which provides guidelines for operating “effective whistleblowing management systems within organizations based on the principles of trust, impartiality, and protection” (ISO 2021).

5 Conclusion and outlook*

Crises and whistleblowers “have some noticeable commonalities. The former are extraordinary situations, and the latter are extraordinary people. [...Hence], if there is [a smoldering] crisis resulting from corrupt, illegal, or unethical behavior, this might probably be because of a lack of whistleblowers in that environment. Therefore, whistleblowers may play significant roles before, during, and after crises” (Demir 2013, 996). This thesis used a qualitative approach by interviewing ten experts from different countries and backgrounds to investigate the impact of the new EU directive on the role of whistleblowers in PCM. Especially in light of the directive's timely implementation on December 17, 2021, it is worthwhile taking a closer look at its effect. The thesis reviewed relevant theoretical concepts regarding the Wirecard crisis, whistleblowing, and CM. The theoretical concepts were used to complement the empirical parts. As the research question is built on two subordinate research questions, the thesis first evaluated the effect of whistleblowing in the field of PCM. The research results demonstrated a real value in positioning whistleblowing and (proactive) CM in the context of a broader coalescence of management processes. In fact, the author developed a concept to spotlight the strategic value whistleblowers have in CM, namely how whistleblowers help organizations to reduce the surface of the triangle of ignorance in CM (see Figure 2). The author concluded that the surface of the triangle of ignorance, which represents the time an organization willingly or

unwillingly refuses to acknowledge the existence of a crisis, can be minimized by a whistleblower. This is possible as whistleblowers provide crisis managers with early and first-hand information about specific issues, helping organizations to better understand their current situation. Congruently, the time needed for an organization to recognize and accept a crisis is shortened, and thus, the destructive potential of a crisis can be prevented. However, the author emphasized that whistleblowers should first report internally because reporting outside the organization entails a crisis-triggering effect from an organizational perspective.

Further, the authors sought to understand how the EU directive would have strengthened the importance of whistleblower protection in the Wirecard crisis (Chapter 4.4). The performed research showed that the EU directive creates standards across EU Member States and is an important step towards improving the overall situation of whistleblowers through an improved personal and material scope, clear reporting structures, and protection from retaliation. When applied to the Wirecard case, the analysis showed that the crisis and the company's downfall could most likely have not been prevented, due to high degree of criminal activity controlled top management. However, the mentioned measures of the EU directive could have promoted an earlier uncovering of the case by creating clear structures for whistleblowing. Thus, the author concluded that the EU directive would have offered the potential of a mitigated economic damage and crisis extent.

For the overall research question, the authors argued that if the EU directive comes into force, the positive significance of whistleblowers in PCM will increase. The rationale behind this is that the new directive creates incentives for organizations to implement and maintain such a system while having appropriate follow-up resources ready. Furthermore, the authors stated that the EU directive will empower individuals to blow the whistle as it addresses and mitigates their key concerns, namely the fear of retaliation, the lack of knowledge of where and how to report, and the concern a report would not change the organization's course of action. The EU

directive prohibits any form of retaliation against whistleblowers and obliges organizations to implement clear whistleblowing arrangements and to conduct diligent follow-up measures. As a result from the EU directive, it is anticipated that the number of whistleblower reports will increase. A higher number of whistleblower reports is not only an indicator of a problem of which the organization is currently unaware, but also provides the organization with an information advantage and a greater opportunity to prevent an event from developing into a crisis. Furthermore, the EU directive is expected to initiate a transformation of the rationale of whistleblowing from a denunciation to a value-adding action for the greater good. The authors defined whistleblowers as an organizational asset from a progressive crisis prevention perspective. If appropriately protected and empowered, this asset grants crisis managers an advantage by detecting early warning signs.

Nevertheless, the authors acknowledge that the thesis does not claim to provide an estimation of whether the number of corporate crises will increase or decrease based on the implementation of the EU directive. Instead, the authors conclude that whistleblowers are assets that should be used to prevent crises or to reduce the crisis impact on the organization. Beyond that, some further limitations have been identified. First, the lack of suitable experts knowledgeable in all topics was a major challenge due to the high degree of specificity of the topics considered. This resulted in a limited set of available data. Second, the implementation of the EU directive is still in progress and subject to numerous dynamics. Therefore, changes may occur in the aftermath that deviate from the research status presented. Furthermore, the retrospective consideration of the Wirecard case under a legal framework to be implemented is subject to uncertainties and hypotheses, which can only be fully evaluated after the EU directive is enacted.

Based on the presented research results, indications for future research fields can be derived. First and foremost, a quantitative validation of the qualitatively collected results could help to

verify the crisis prevention potential of whistleblowing. Additionally, since the obligation for national implementation of the EU directive leads to diverging laws within the EU Member States, these differences and their effects on whistleblowing could be a potential point of interest for further research on the directive itself. Article 27 of the EU directive offers a first concrete starting point for further assessments in the obligation to collect and evaluate reports. Moreover, once the directive comes into force, an impact assessment of the directive's effect on CM could reveal additional insights about the crisis-prevention character of whistleblowing. As a final remark, the shift in perception of whistleblowers to valuable assets must be subject to appropriate research and discussion activities, both inside and outside scientific institutions. This thesis can be understood as part of these research and discussion activities.

6 Appendix

Appendix 1: Complementary definitions

Subject	Definition
Corporate governance	Corporate governance is “the determination of the broad uses to which organizational resources will be deployed and the resolution of conflicts among the myriad participants in organizations” (Daily, Dalton, and Cannella 2003, 371).
Compliance	Compliance is the knowledge of and adherence to legal, regulatory as well as contractual and normative specifications and requirements (Müller 2015).
Red flags	“Red flag is a common term for a sign of danger [...]. While scanning is a general process, crisis managers should also look for known warning signs of crises, what can be called red flags. Red flags would aid the crisis prevention process by specifying what to look for, where to look for it (source), and what it means (analysis).” (Coombs 2015, 65)
Stakeholder	A person or group that influence or gets influenced by an organization (Bryson 2004).
Risk management	Risk management is the continuous process of early detection, monitoring, collection, analysis, evaluation, treatment, reporting and communication of risks (Müller 2015).

Appendix 2: Not part of this individual work

Appendix 3: Not part of this individual work

Appendix 4: Not part of this individual work

Appendix 5: Not part of this individual work

Appendix 6: Not part of this individual work

Appendix 7: Not part of this individual work

Appendix 8: Not part of this individual work

Appendix 9: Not part of this individual work

Appendix 10: Distinguishing crises from emergencies and disasters

Crisis	Emergency	Disaster
<p>“An organizational crisis — an event perceived by managers and stakeholders as highly salient, unexpected, and potentially disruptive— can threaten an organization’s goals and have profound implications for its relationships with stakeholders.” (Bundy et al. 2017, 1662)</p>	<p>“Emergencies can be defined as situations requiring a rapid and highly structured response where the risks for critical decision makers can, to a relative degree, be defined. A key feature of emergencies [...] is that for those who manage such situations, conceptualization (or mental modelling) both appears and is sufficient to identify an appropriate and effective strategy.” (Borodzicz 2005, 79)</p>	<p>A sudden event that seriously disrupt daily routines of systems, which pose a danger to values and social goals. Hence normal operations cannot cope the exceptional circumstances, and thus new actions are required to manage the disruption (Quarantelli 2005). According to Coombs (2015, 19) disasters are also “large in scale and require response from multiple governmental units.”</p>
<p>Finding a common ground in terminology is paramount for researchers, managers and students because otherwise, “scholars who think they are communicating with one another are really talking of somewhat different phenomena” (Quarantelli 1995, 224). Additionally, to proper respond to certain events, researchers point out the need to distinct between emergency, disasters and crises (Borodzicz 2005; Coombs 2015; Tenckhoff and Siegmann 2019). Importantly, researchers argue if disasters are just the “irreversible and typically overwhelming result of ill-handled emergency and crisis” (Dombrowsky 1995, 242) or if these “can spawn organizational crises” (Coombs 2015, 19). This thesis intends not to decide whether a disaster is a result of a crises or vice versa, however it follows a review of disasters and crises by Shaluf, Ahmadun, and Mat Said (2003, 25), that “disaster and crisis are two different [but] related events where the crisis is more comprehensive than the disaster.”</p>		

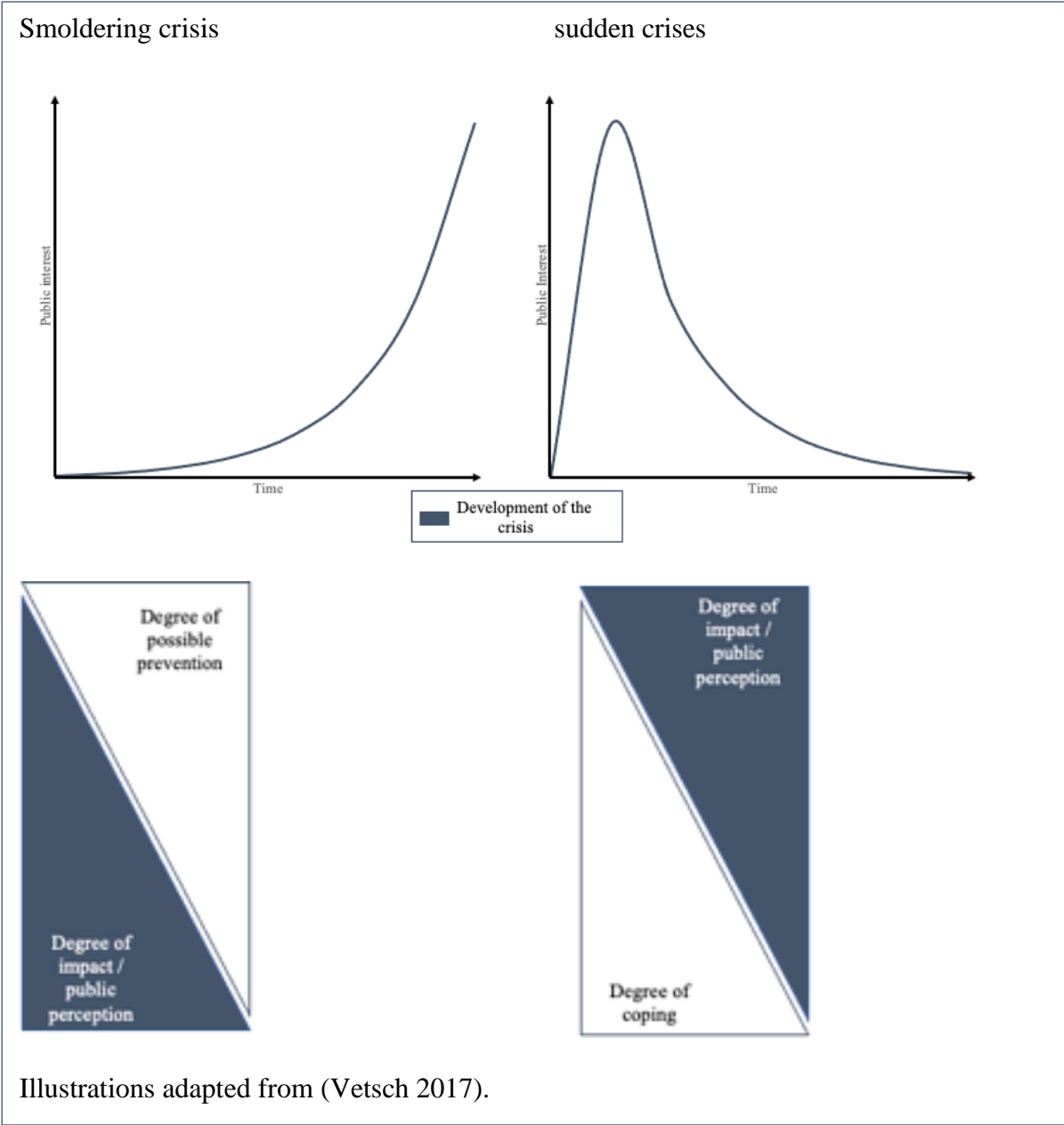
Appendix 11: Researcher's definition of a crisis

Author	Selected definition of a (corporate) crisis
(Heinzen 1995)	There are a number of distinctive characteristics of a crisis: “First, the crisis constitutes a series of events rather than the management of a single entity. Second, the crisis may be caused by a disaster [...] Third, the crisis has a diffuse origin making it difficult for decision makers to gain a macro view of events. Fourth, it is unclear what action needs to be taken” (Borodzicz 2005, 80)
(Devlin 2007, 5)	A “‘crisis’ is an unstable time for an organization, with a distinct possibility for an undesirable outcome. This undesirable outcome could interfere with the normal operations of the organization, it could damage the bottom line, it could jeopardize the positive public image, or it could cause close media or government scrutiny.”
(Bundy et al. 2017, 1662)	“An organizational crisis — an event perceived by managers and stakeholders as highly salient, unexpected, and potentially disruptive—can threaten an organization’s goals and have profound implications for its relationships with stakeholders.”
(Coombs 2015, 15)	A crisis is the perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental, and economic issues, and can seriously impact an organization’s performance and generate negative outcomes.
(Vetsch 2017, 274)	The term corporate crisis is understood to mean a perceived, process-like event in a company-related context that involves a potential danger and represents an interruption of a hitherto usual and/or continuous development within the company, whereby the beginning, cause, duration, course, and management of this event are initially uncertain, and the handling of this event is negotiated in social discourse.
(ISO 28002: 2011, (3.10))	Crisis is an “unstable condition involving an impending abrupt or significant change that requires urgent attention and action to protect life, assets, property, or the environment”
(Pearson and Clair 1998, 60)	“An organizational crisis is a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly.”
(Argenti 2007, 213)	A corporate crisis is a “major catastrophe that may occur as a result of human error, intervention or even malicious intent. It can include tangible devastation, such as the destruction of lives or assets, or intangible devastation, such as the loss of an organization’s credibility or other reputational damage”
(Capra 1982)	According to the Chinese idea of crisis, a crisis can be a danger or opportunity. Hence, proper handling of a crisis can evolve into an opportunity for the organization to get out of the situation more resilient and benefit from it (Borodzicz 2005; Capra 1982).

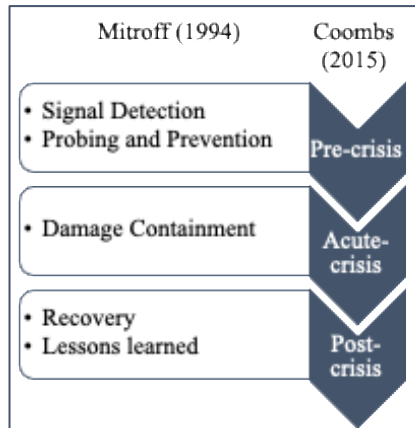
Appendix 12: Crisis types

The table outlines the different crisis types (Coombs and Holladay 2001; Hammel 2016; Devlin 2007; Coombs 2015; Vetsch 2017; Schreyögg and Ostermann 2014)	
Type	Explanation
The legal dimension	Whether it is a business or legal crisis
The phase within the company development process	Whether the company is in its start-up, growth, or stagnation/shrinkage phase. I.e., start-up, growth, or stagnation/shrinkage crisis
The degree to which the crisis can be influenced	Is it a potential, latent or acute crisis?
The cause	A crisis can be exogenous (triggered from the outside) or endogenous (developed from the inside of an organization). And exogenous event could be a negative public perception of a specific action the organisation had done or failed to do. An endogenous event is e.g., a product issue that harms customers.
The responsibility	Following the attribution theory, Coombs (2015) characterises three causes of corporate crises, which are differentiated according to the responsibility for a crisis: Victim crisis, in which the organization bears very little responsibility; accident crisis - the company can be charged with partial responsibility; The preventable crisis attributes very strong organizational responsibility.
The area of the company that triggered the crisis	Whether the crisis is in an individual business line, or companywide-financial or organizational crisis.
The threatened company potentials	Liquidity vs. success crisis / profitability vs. product crisis / sales vs. strategic crisis
The development of a crisis	Sudden crisis types mutate due to external shocks that require sudden adjustment; on the other hand, smoldering crisis types are the result of a slow cumulative adjustment that tips into change at a threshold level

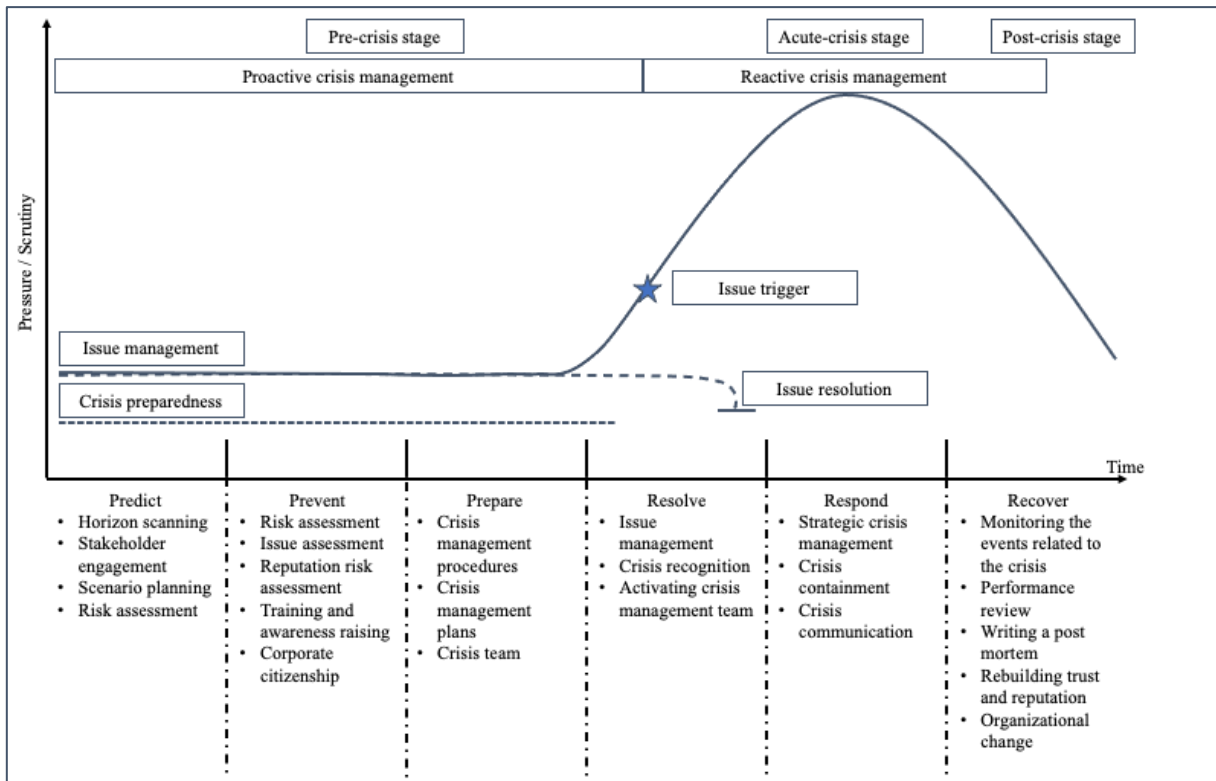
Appendix 13: Comparison of smoldering crisis and sudden crisis



Appendix 14: Based upon the five phases of CM curated by Mitroff (1994), Coombs developed a three-staged model consisting of various steps also known as the CM life cycle



Appendix 15: Risk life cycle, adapted from Griffin (2014, 119) with further notes from Coombs (2015)



Appendix 16: Organizational disciplines that provide measures to avoid crises

Disciplines	Explanation
Issue Management	<p>Issue management provides a framework that entails an effective preventive process (Jaques 2010). In detail, it is a management process that involves scanning, identifying, prioritizing “a condition or event, either internal or external to the organization which, if it continues, will have a significant effect on the functioning or performance of the organization or on its future interests” (Regester and Larkin 2005, 43). Once identified, management needs to decide what to do and implement actions accordingly (Jaques 2007). Consequently, issue management is perceived as a mechanism of PCM, when the efforts of the issue management prevent an issue from developing into a crisis (Fahey and King 1977; Coombs 2015; Jaques 2010, 2007; Gonzalez-Herrero and Pratt 1995).</p>
Risk Management	<p>Risk management is the second organizational discipline. Risks are integral part of the day-to-day operations of an organization and thus are inevitable (Coombs 2015). Risk assessment, as part of risk management (cf. Appendix 1), is the overall process of risk identification, risk analysis and risk evaluation, including the decision of possible actions to reduce or mitigate the risk, which provide essential information for PCM (Levitt 1997; Pauchant and Mitroff 1992; Coombs 2015; ISO 2018). Once assessed, risk managers focus on organizational risk treatment. This turns risk management into a crisis prevention method because, based on this anticipated and informed process, organizations are going to either accept, mitigate, avoid, or transfer identified risks (i.e., uncertain events that, if they occur, could affect the organizations’ objectives and develop into crises) (Coombs 2015; zur Muehlen and Ting-Yi Ho 2005; Levitt 1997).</p>
Reputation Management	<p>Reputation management resembles the third organizational discipline. Reputation is an asset and if appropriately handled, helps organizations to prevent negative events from developing into crises (Griffin 2014; Coombs 2015). Managing reputation therefore “involves efforts designed to influence stakeholder evaluations of an organization” with the purpose to prevent an escalation or damage to the organization’s reputation or to put it more positively, to build favorable reputations (Coombs 2015, 54). For a deeper understanding, Griffin (2014) devoted a comprehensive book to reputation risk management which describes the various steps according to the risk life cycle (Appendix 15).</p>
Scenario planning (complementary)	<p>Another mechanism of proactive CCM is scenario planning, which is a strategic planning method developed by Herman Kahn (Von Der Gracht 2008). Each stand-alone discipline mentioned above should conduct an explorative exercise called scenario planning, in which the disciplines</p>

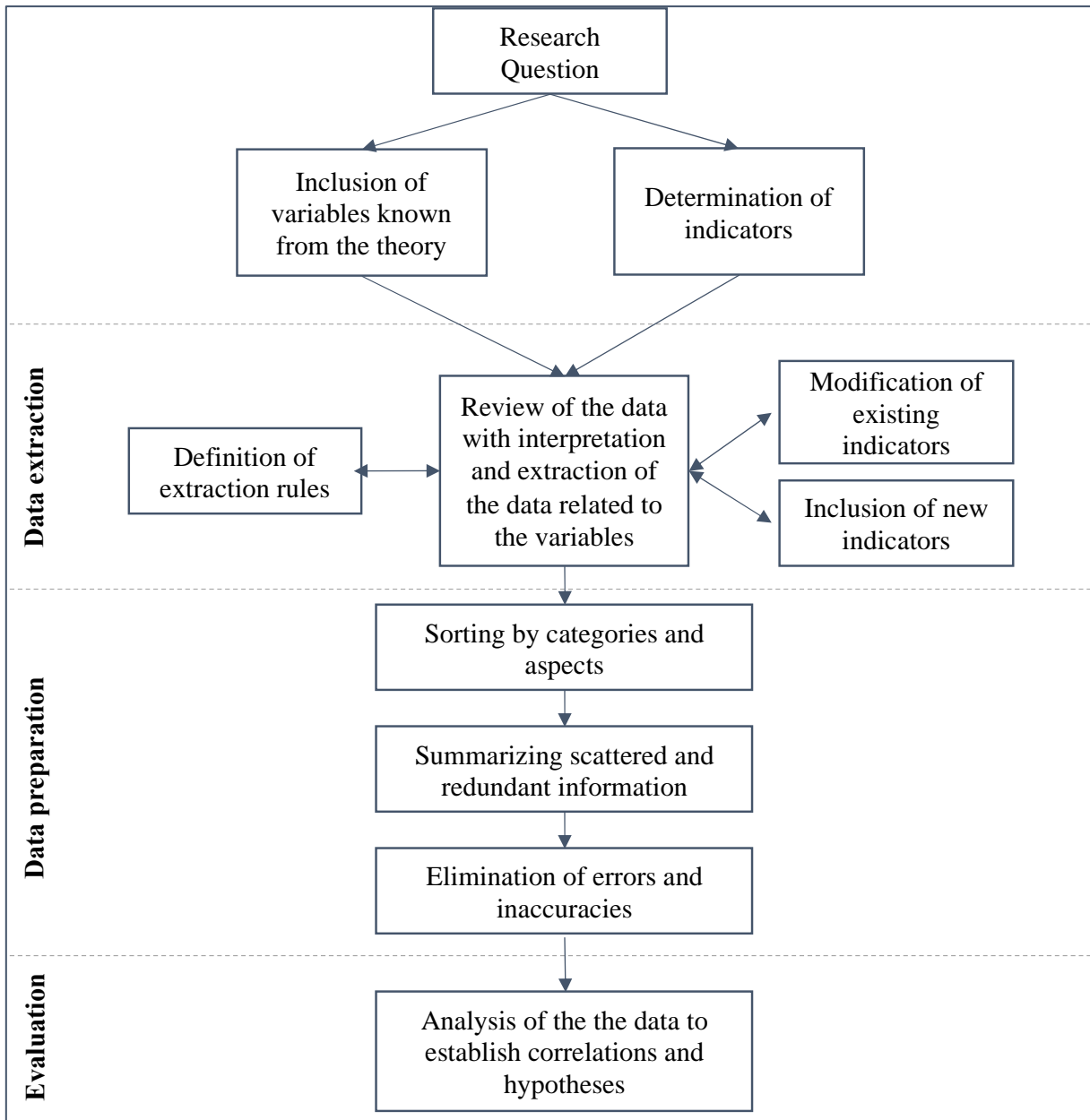
	<p>think through in detail how the identified risks might develop over time, and what the impact of the developed scenario would be - especially for the worst-case scenario. Ideally, this explorative process happens within a workshop at which the members try to identify the triggers that can cause the certain scenario, and what factors might escalate the risk (Griffin 2014). Within crisis management, scenario planning is a “useful tool for managing uncertainty, risk, and opportunity because it provides a well-tested framework for understanding future needs and prioritizing near-term actions” (Canyon 2018, 3; Bradfield et al. 2005; Kash and Darling 1998).</p>
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Appendix 17: Devlin's (2007) CM approach within the acute-crisis stage



Practice	Explanation
1. Take charge quickly	In a timely manner, the organization needs to take charge of the event. This includes activating the crisis management team, appointing a crisis manager, establishing a command center, and activating communication channels.
2. Establish the facts	The crisis management team needs to collect and verify what is reported and reconstruct the event that led to the crisis.
3. Tell your story	Take the lead and inform all relevant stakeholders (i.e., media, public, customers, shareholders, suppliers, and employees) using all available and suitable communication channels.
4. Fix the problem	At this step, the organization recoups losses by making the right decisions in a timely manner.

Appendix 18: Sources of Information about potential crises

Potential crises sources to consider (adapted from Coombs (2015, 71) with input from Jaques (2007))	
Issue management sources	<ul style="list-style-type: none"> • News media: newspaper, television news, business magazine • Trade journals: medical and science journals • Newsletters: Government publications • Public opinion polls: Public opinion experts • Stakeholder engagement • Archives for professional associations, special interest groups, government agencies • Discussion groups • Preventive maintenance • Audits
Risk assessment sources	<ul style="list-style-type: none"> • Quality management • Environmental crisis exposure • Legal compliance audits • Workers' compensation exposure • Internet use monitoring • Liability exposure • Criminal exposure • Natural disaster exposure • Product-tampering exposure • Financial audits • Safety and accidents records • Ethical climate survey • Behavioural profiling • legislative trend analysis
Reputation Sources	<ul style="list-style-type: none"> • Consumer-generated media: websites, blogs, and discussion groups • Social Media • Stakeholder comments sent to the organization • Public opinion surveys
Other	<ul style="list-style-type: none"> • Strategic Foresight and Scenario Planning • Leadership surveys • Media content analyses • Trade association participation • Conferences



Appendix 20: List of interviewees

#	Nationality	Area of expertise	Institution
1		Compliance; Corporate Governance	Corporation
2		Wirecard; Financial Industries; Investment Banking	Business News Magazine
3		Whistleblowing; EU regulatory	Whistleblower non-profit association
4		Compliance; Whistleblowing; EU regulatory	Corporation; Consultancy
5		Security Management; Crisis Management	Consultancy
6		Whistleblowing; Crisis Management; Corporate Communication	Research Institute
7		Whistleblowing; EU regulatory	Anti-Corruption NGO
8		Crisis Management	Consultancy
9		Business Ethics; Whistleblowing	Research Institute
10		Security Management; Crisis Management; Whistleblowing	Corporation; Consultancy

Expert Interview Guideline: Work Project / Thesis Risk & Crisis Management

Interview-Questions

Please note that this is a semi-structured interview, so further questions may arise during the interview. Furthermore, depending on the background of the expert, the thematic focus of the interview may vary, i.e., some questions/topic blocks may not be asked.

#	Question
1.	Whistleblowing
1.1	What is your definition of Whistleblowing?
2.	Whistleblowing & Crisis Management
2.1	How do you define a crisis?
2.2	Can Whistleblowing be a crisis prevention method?
2.3	How effective is whistleblowing management in crisis prevention in your opinion?
2.4	Which pre-requisites must be implemented beforehand, to guarantee an effective whistleblower system within the proactive crisis management?
3.	The new EU-Whistleblower directive
3.1	How do you assess the protection of whistleblowers and the change in their positioning due to the new EU directive?
3.2	From your point of view, will the number of whistleblowers increase or decrease in the future due to the new EU directive?
3.3	What effect does this have on proactive crisis management within corporations?
4.	The case Wirecard and Whistleblowing
4.1	About the whistleblowing EU directive; do you believe that it could have had an impact on the Wirecard crisis? If so, to what extent?
4.2	Which aspects of the EU directive in particular could have encouraged the forthcoming of whistleblowing and enhanced their importance within the case of Wirecard?
5.	Outro
5.1	Are there any other additional aspects which you would like to mention to complement our interview?

Appendix 22: Code system for the qualitative content analysis

Category	Subcategory	Definition	Coding rules	Anchor example
Crisis definition		An event perceived by manager and stakeholder as highly salient, unexpected, and potentially disruptive [, which] can threaten an organization’s goals and have profound implications for its relationships with stakeholders.	This code is assigned when, information is given about the definition of crisis, including types, form of appearance and other relevant characteristics.	"A crisis is an event that has a real or potential negative impact on a company's strategic objectives"
Crisis management	Definition o. proactive crisis management	Proactive CCM “is a component of a corporate management system that aims to apply a range of strategies for avoiding or preventing crisis situations”	This code is assigned when, information is given about the definition of proactive CCM.	"Memorize it's identifying all your risks upfront, rating them as to what the most probable would be, ensuring that your people are trained and that your activation process is clear for what what constitutes the crisis as well as."
Crisis management	Mechanisms or methods of proactive crisis management	Methods are crisis-sensing mechanism; positive corporate culture; issue management; reputation management; risk management; stakeholder management / stakeholder theory in corporate governance; scenario planning; effective compliance program; awareness training, educational training; positive initiatives (e.g., corporate citizenship)	This code is assigned when, information is given about methods or mechanisms of proactive CCM. Also, if information is mentioned about how to prevent crises.	"So, the proactive piece is all about planning. It's about training"

Information gathering o. t. crisis management team (inductive code)		A crisis management team must gather external and internal information from their company through various way. This can include incident management, BCM, global monitoring intelligence	This code is assigned, when information is given about possible ways to gather information by the CMT.	"So by that I now understand the information gathering, this incident management, or through the BCM information or warning signals arise or is an early warning system"
Whistleblowing i. crisis management	Whistleblowing as a crisis prevention method	If Whistleblowing can be used as a tool to prevent crises, and thus is part of a proactive CCM.	This code is assigned, when opinion is given about whether whistleblowing is a method to prevent crises or not.	"Yes, definitely, if you place it sensibly, to the company that it's just not considered denunciation, it's considered a productive measure."
Whistleblowing i. crisis management	Effectiveness of whistleblowing in crisis prevention	Evaluate if whistleblowing influences crisis management.	This code is assigned when opinion is given about the effectiveness of whistleblowing in crisis prevention. This also includes any evaluation of whistleblowing as a crisis prevention method	"How much can it help preventively. I think it could really help in the lower double-digit percentage range. On the other hand, it is justified because you have it anyway, you need it, if you then integrate it sensibly into crisis management or have a good interface, it is not a loss and large corporations, they actually only assume that they have something happening every few years. And if such an event can be intercepted, that's worth a lot."
Whistleblowing	Whistleblowing definition	Whistleblowing is "the disclosure by organization members (former or current) of illegal, immoral or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action."	This code is assigned when, information is given about the definition of whistleblowers, act of blowing the whistle or any other information that refers to the whistleblower.	"They've spotted something wrong on a moral, ethical or legal front, and they do not feel for a variety of motivations we can speak."

Whistleblowing	Pre-requisites f. e. whistleblowing	<p>High degree of trust; person feels acknowledged, heard and safe from any personal harm; expect suitable actions from the complaint receiver; internalization and institutionalization of ethical values and awareness; implementing official arrangements (e.g., hotline, open-door policies, work councils.); training and awareness of potential whistleblowers;</p> <p>the communication culture within the company may affect the effectiveness and acceptance of whistleblowing.</p>	<p>This code is assigned when information is given about any requisites needed to implement whistleblowing successfully. Any informal or formal implementation ideas can be mentioned.</p> <p>This code is assigned when, information is given about a corporate culture, its importance, or any example of working culture, i.e., tone from the top, top down, corporate citizenship,</p>	<p>“Desirably, what would be great for prevention is for organization to have for, and that's a prevention method that that Griffin, the one in that book he mentions, is, for instance, good corporate. responsibility, OK, social responsibility. Right, if you have that, I I think that that is the the the term that that that uses but. Uh, yeah, it's it's It's called corporate citizenship.”</p> <p>“But we believe that the vast majority of people in the scene believe that protection under labor law is not enough. If you really want to protect such people, you need some form of financial protection for them or social and psychological support or something.”</p>
Former Whistleblowing regulatory environment	Whistleblower protection until today – EU	Evaluation of the historical protection of Whistleblowers by Whistleblower legislation or existing regulations that are currently in place within the EU;	This code is assigned when, information is given about the level of protection for whistleblowers under the current or former EU law.	n/a

Former Whistleblowing regulatory environment	Whistleblower protection until today – Germany	Evaluation of the historical protection of Whistleblowers by Whistleblower legislation or existing regulations that are currently in place within Germany;	This code is assigned when, information is given about the level of protection for whistleblowers under the current or former German law.	“Well, whistleblower protection in Germany in particular is poor. In other European countries it is better at the moment. In Germany there are simply a lot of regulatory gaps, and you have to rely on judge-made law.”
Whistleblowing EU directive	Whistleblower protection after new EU directive	Change in whistleblower protection of the new EU directive; parts and legislation of the new Eu directive	This code is assigned when, information is given about the level of protection for whistleblowers after the successful implementation of the new EU directive in national law. Also, any potential changes can be named.	“Basically, it is important for us to always emphasize with legal protection that we have a clear law in which people can also work in the end. And this includes extending the scope of application beyond European law.”
Whistleblowing EU directive	Effect of new EU directive in proactive CCM	Impact of the EU directive on crisis prevention mechanisms in organizations; Support of the Institutionalization of whistleblowers in proactive crisis management	This code is assigned when any information is given about the incoming effect of the new EU directive on the proactive CCM.	“So it will have a positive effect because I just have more information and then I can also maybe react early. Again, the proactive in the departments, that it doesn't come to a crisis in the first place, that I react faster. That will give an improvement. It can't really get any worse. “
Whistleblowing EU directive	Effect of EU directive on Wirecard	Could the upcoming directive have impacted the Wirecard case; specific parts of the directive that are important are named; Whistleblower protection; policy fields that are included;	This code is assigned when information is given about the potential impact of the EU directive on the Wirecard case.	“So, from a principle point of view, of course, the, the whistleblowing in itself would be a good addition to the right in such a context.”

Whistleblowing EU directive	Effect of EU directive on number of whistleblowers	Are Whistleblowers going to be more likely to come forward due to the new legislation; Encouragement of them by the new legislation or specific aspects of the legislation as well as limitations; anticipation of the development of whistleblower numbers	This code is assigned when the respondent provides an approximate number of whistleblowers after the implementation of the new directive.	“Yes, I believe that the numbers will increase. If only because people are concerned with the issue. And because there are clearer reporting channels and things are then also classified as whistleblowing.”
Wirecard case	Whistleblower in the Wirecard case	The major whistleblower is Pav Gill. Further namely unknown Whistleblowers (e.g., Singaporean prosecutor)	This code is assigned when information is given about the whistleblowers of Wirecard	“And there we have just especially these two employees from Singapore. And especially Pav Gill .”
Wirecard case	Governance issues at Wirecard	Assessment of overall governance issues in the Wirecard case in relation to whistleblowing as a tool in crisis prevention	This code is assigned when information is given on general governance related aspects at Wirecard	“Problematic personal relationships, entanglements, sexual, financial and other nature of board members. It’s the other problematic interrelationships also here so to speak is.”
Personal limitation of the expert (inductive code)		An expert is a knowledgeable person in one field but lack knowledge in other areas.	This code is assigned, when the interviewee states by question that he or she is incapable of offering an adequate answer due to lack of experience or knowledge in the discussed field.	"I think that's where I really lack the knowledge on that part that they're talking about, that I can say. Or for me, it was so present early on, then, and I also don't know in what form those were active, in what function those were."

Usage of technology (inductive code)		Any mentioned technologies which can impact whistleblowing or crisis management	This code is assigned, when information is given about technologies, which can impact whistleblowing or crisis management	"So in the end, I always have too much of a human factor." "Why use AI?!: "But where I have little information and what we just discuss, there is not so much. That's always something very special in itself. I think it's really harder to say with AI that we'll get it right."
White-collar crime (inductive code)		Frauds committed by business of public professionals with reference to their work	This code is assigned when information is given regarding the prosecution or penalization of white-collar crime	"In Germany, the pressure to prosecute white-collar crime is extremely low on the one hand, so to speak, precaution is extremely low, but on the other hand, concern also turns out to be problematic. And why is the follow-up also problematic? Because the penalties and threats of punishment are still extremely low. "
Wirecard Case – Corporate Culture at Wirecard (inductive code)		Corporate Culture; Decision processes and procedures; by what is the organization characterized.	This code is assigned when information is mentioned about aspects of Wirecard’s corporate culture	"This was a multi-layered culture. On the one hand, the Board of Management was extremely hierarchical, with Markus Braun at the top in particular, and there was an extreme, top-down culture regarding some decision-making processes. "

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