Practices of Building and Maintaining Trust in Cross-functional Teams

by

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Abstract

This dissertation investigates how cross-functional teams build and maintain trust. Teamwork is challenging and requires trust, a complex process created in the interaction of team members, and embedded in the organizational system. But there is limited research on how cross-functional teams build and maintain trust in practice, and on the meanings and interpretations that team members, managers, and consultants ascribe to trust. Much research explains how team members gather and signal trustworthy information, but not how they interpret this information during team interactions. To address these research gaps, this thesis draws on social practice theory and offers empirical evidence for a practice approach on trust in teams. Team members, managers, and consultants were interviewed and a cross-functional team kick-off was observed to find out how trust as a practice is conceptualized and produced. Qualitative content analysis, metaphor analysis, and interpretive analysis were used to analyze the data. Research findings include several metaphors of trust in cross-functional teams, specific trust-building and maintenance practices, and illustrations of how these practices are produced and reproduced in team interactions. Trust as a social practice thus moves research from the path of demonstrating that trust in teams is important in contexts of high vulnerability and uncertainty, to the path of how trust becomes important in these contexts by meaning and interpretation. Considering these findings, future studies should focus more on the collective patterns of meaningful activities that build and maintain trust, the use of metaphors to study trust in teams, and the nonverbal cues that build and maintain trust.

Keywords: trust-building, trust maintenance, social practice, cross-functional teams.
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1. Introduction

Building trust is vital for teamwork—vital but not effortless or uncomplicated. More often than not, successfully accomplishing team tasks and project objectives requires trust within the team. Not every team task can be monitored or predicted, so team members must suspend uncertainty and vulnerability to the extent that trust becomes a practice.

The Rolling Stones play together as a band for more than 50 years and their practices enable them to perform and improvise seamlessly. The members describe that before every tour they rehearse every day for more than 2 months, enabling them to create a collective rhythm. Richards states that he knows exactly what will happen by watching Watts’ left hand. When there is a lack of tempo, Richards glances at Wood and the whole team picks up the pace. The band performs almost flawlessly because “there is so much trust between us” (Tu, 2012).

If organizations are like living organisms (Morgan, 1986), then teams are the arteries that connect all parts of its body and make it possible for the body to function and renew itself. Trust is the blood that runs through these arteries. Building teams and organizations on trust heightens well-being and productivity—employees are happy at work and perform well. Trust helps everyone suspend their vulnerability and uncertainty about information, relationships, and complexity, and enables them to relate based on positive expectations.

The paradox or dilemma of trust in work teams is that on the one hand, teams must play by the rules (i.e., structures and procedures for how to perform). On the other hand, in order to win the game, teams must go past these structures, and improvise beyond what they already know or what they can achieve together. Trust is suspending the unknown to achieve a balance between structure and improvisation. How do team members collectively achieve this suspension? What meaning do they give to their interactions? And how are these trust interactions maintained or reproduced? The purpose of this study is to answer these questions
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from a social practice perspective—more precisely, to analyze the patterns of activities that build and maintain trust in the context of cross-functional teams.

Why this setting? Uncertainty and vulnerability characterize the complex environment of cross-functional teams, and these aspects are preconditions of trust development and maintenance (Möllering, 2006). Cross-functional teams come together to develop, manage or implement strategic, complex organizational decisions either as a result of organizational change (e.g., merger, acquisition, downsizing, outsourcing) or innovation (e.g., new product, new strategy) within specific time, quality, and cost constraints (Loehr, 2015; Zolin, Hinds, Fruchter, & Levitt, 2004). These characteristics make trust more relevant for cross-functional teams and vice versa.

1.1 Research Questions and Objectives

The objectives of this thesis are twofold: to propose theoretically an alternative conceptualization of trust in social systems, i.e., cross-functional teams, from a practice perspective; and to illustrate empirically how trust practices are produced and reproduced in interaction, in a specific type of team—the cross-functional team (see Section 1.2).

Limited research exists on how cross-functional teams build and maintain trust in practice, and on the meanings and interpretations that team members, team managers and team consultants ascribe to trust. Much is known about how team members gather and signal trustworthy information but not how they interpret this information in interaction. Researchers usually conceptualize trust in teams as shared beliefs of trustworthiness (Costa, Fulmer, & Anderson, 2017), disregarding that trust in teams takes different forms and meanings according to context. Team and task type, the phase of the project, as well as organizational embeddedness are always relevant. First impressions are critical for developing perceptions of trustworthiness, but most studies look at what team members communicate rather than at how they communicate (nonverbal cues). Most of the knowledge on trust in teams comes from
Introduction

quantitative and experimental designs, creating a lack of qualitative field research that could contribute depth and detail about the phenomena of trust in teams (Patton, 2002).

These research gaps are addressed here by looking not only at what team members believe, but also at how they interact, and most importantly, how they interpret their interactions. How do cross-functional teams conceptualize and produce trust? What meaning do team members give to trust? What activities do they engage in to build and maintain trust? And how do they produce and reproduce trust in team interactions? Answering these questions provides a richer understanding of how team members, managers, and consultants experience trust, and how team interactions produce and reproduce them.

Therefore, the overall research question pertaining to this thesis is: How is trust described and practiced by members of cross-functional teams? To address this research question, the following objectives guide this study: to describe the meaning of trust and its characteristics from the perspective of team members, managers, and consultants; and to examine how trust operates in practice—i.e., the type of actions and interactions that team members engage in to build and maintain trust.

1.2 Research Context—Cross-functional Teams in Organizations

Cross-functional teams are a dynamic and challenging context of organizing characterized by information complexity and relationship uncertainty (Webber, 2002). Parker (2003) defines cross-functional teams as “a temporary group of people with a clear purpose representing a variety of functions or disciplines in the organization, whose combined efforts are necessary for achieving the teams’ complex purpose” (p. 6). Team members must report both to their functional managers as well as project owners and stakeholders. Bishop (1999) emphasizes the adoption of cross-functional teams for complex organizational change projects with a high level of information ambiguity (e.g., new product development, product/service quality improvement, strategy development or implementation).
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One study reports that 70% of organizations use cross-functional teams, and 33% use them 100% of the time (Sarin & O’Connor, 2009). Many organizations choose this form of organizing because the mix of high skills and different professional backgrounds promotes the expectation that the team will be better able to solve complex problems, and implement decisions (Levi, 2010). Parker (2003) and La Fasto and Larson (2001) note that the advantages of cross-functional teams include improved performance and coordination time, reduced time cycle in new product development, faster decision-making, and better problem-solving. The whole culture of cross-functional teams revolves around the ideas of diversity and synergy, namely, that different knowledge and world views are essential for better team performance and that the sum is greater than its parts (Parker, 2003).

But the unique characteristics and competitive advantages that make cross-functional teams appealing for organizations also pose challenges for their functioning well (La Fasto & Larson, 2001). The full potential of cross-functional teams is difficult to tap, and research evidence affirms that the high level of uncertainty and vulnerability associated with this type of team can hinder its functioning optimally (Cohen & Bailey, 1997; Kozlowski & Bell, 2003). Studies also show that most cross-functional teams are dysfunctional and struggle to function effectively (Sarin & O’Connor, 2009; Webber, 2002).

The challenges that cross-functional teams encounter have to do with their characteristics, i.e., functional diversity, information ambiguity, task complexity, and multiple reporting, and the possible ways to alleviate them is through building trust. Figure 1 offers an overview of the main challenges that cross-functional teams face and the mechanisms by which trust helps to overcome them.
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**Functional diversity**
- Increasing similarity between team members by:
  - Clarifying roles and responsibilities
  - Clearly communicating expectations

**Information ambiguity**
- Reducing ambiguity by:
  - Transparent information flow
  - Structured communication

**Task complexity**
- Increasing predictability by:
  - Competent and authentic leadership
  - Reliable organizational systems

**Multiple reporting**
- Managing risks by:
  - Sharing sensitive information
  - Admitting weaknesses

![Figure 1](image)

**Figure 1. Managing challenges of cross-functional teams by building trust**

Functional diversity refers to challenges cross-functional teams must deal with because of differences between team members who come from different professional backgrounds and departments (Parker, 2003). These differences include personality, culture, and professional jargon, as well as task responsibilities and reward systems. For instance, within the same organization, the marketing department focuses on creating and maintaining markets, and therefore develops professional jargon with terms and abbreviations referring to these activities; whereas the production department is in charge of turning inputs into finished outputs, using its own vocabulary. The members of the marketing and production departments get rewarded for achieving different objectives, the marketing department for customer and market development, and the production team for efficient utilization of resources. These different professional jargons, objectives, and reward systems could be potential sources of communication misunderstandings, team conflicts, and even stereotyping (Levi, 2010).

Trust helps manage functional diversity by increasing perceptions of similarity between team members, decreasing stereotypes that pertain to professional roles and identities, and alleviating the effects of social categorization (see Figure 1). Team members who join the team from a different professional background, perhaps even a different culture, will be perceived
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as different and possibly even untrustworthy (Chou, Wang, Wang, Huang, & Cheng, 2008; Williams, 2001). Findings from ethnographic and laboratory studies demonstrate that team members perceived members who do not belong to their in-group as less trustworthy than members of their own group and that this distrusting effect was observed even when group boundaries were based on minimal criteria (Kramer, 1999).

Team members’ heterogeneity has been shown to result in low initial trust at the beginning of the interaction in virtual project teams (Jarvenpaa & Leidner, 1999). One possibility for alleviating the potential negative effects of team member heterogeneity is to build team trust in the initial phases of team development in order to promote healthy team functioning (Crisp & Jarvenpaa, 2013; Jarvenpaa, Shaw, & Staples, 2004). When trust develops in teams, differences in terms of the activity and characteristics of the work teams are better understood. Teams that spend time in the beginning of their interaction on getting to know each other, communicating their expectations, and clearly defining their roles and responsibilities are better off than teams who jump directly into the task (Kozlowski & Bell, 2003).

Information ambiguity is about managing incomplete and sometimes equivocal information from multiple stakeholders (Gaan, 2012). Developing trust helps manage information ambiguity by ensuring a transparent information flow, and developing structured ways of communicating within the team. For example, developing “a single-point of contact” strategy makes for a transparent and structured communication flow. One team member acts as a communication link to his or her work group, clients, and other external stakeholders by keeping them updated with the work progress and soliciting ideas for the project (Parker, 2003). In this sense, each team member becomes the point of contact for that project, filtering and transmitting information from their departments to the stakeholders and back again.

Developing trust between team members is a strategy for reducing information
Introduction

ambiguity, especially in temporary teams (Jarvenpaa, Knoll, & Leidner, 1998; Jarvenpaa et al., 2004), by ensuring a transparent information flow and developing structured ways of communicating within the team (see Figure 1). Information symmetry and good communication are factors that distinguish high performing from under-performing teams (Aubert & Kelsey, 2003). Good relationships and trust have been found to mitigate the effects of information asymmetry between teams and suppliers (Howorth, Westhead, & Wright, 2004).

Task complexity refers to the ability of cross-functional teams to solve complex business problems that transcend disciplines and functions (Webber, 2002). By providing the structure for bringing together professionals, such as scientists and engineers from different backgrounds and with a diverse set of skills, cross-functional teams enable organizations to solve complex problems. As products and strategies become more and more complex, it is almost impossible to be able to predict all steps and envision the final product (Jones & Jones, 2011). Therefore, team members and managers in cross-functional teams must develop strategies for dealing with the complexity and uncertainty of the tasks and projects.

Trust helps team members reduce task complexity by increasing predictability and monitoring. When the project tasks become too complex to handle, team members rely on each other (Yakovleva, Reilly, & Werko, 2010), on a leader who knows which direction to take (Webber, 2002), and on organizational systems and processes that offer ways of keeping track and reporting (Gaan, 2012; Spector & Jones, 2004). It is the responsibility of the team manager or external consultant to encourage and support the team to increase this perception of predictability, in that while some processes and tasks are complex, management and organizational support exists to help deal with them. For example, an authentic leader makes commitments and keeps them, fighting for team interests in case the budget needs rectifying or a certain situation must be escalated to the stakeholders (e.g., project owner, customer). By relying on fellow team members, an authentic leader, and the organizational system, team
members are better equipped to manage complexity.

Multiple reporting relationships constitute perhaps the biggest risk for cross-functional teams, as this feature contradicts the organizational single-reporting strategy (Hatch & Yanow, 2003). Ford and Randolph (1992) show that multiple reporting relationships with their functional managers, cross-functional project managers, project owner, and various external stakeholders (e.g., clients, suppliers) cause members of cross-functional teams to experience undue pressure and conflict. Also, their performance evaluation and project incentives and bonuses remain unclear, resulting in ambiguity and uncertainty (Webber, 2002). Ford and Randolph (1992) discuss role conflict, unclear roles and expectations, and high demands as factors that influence work overload and competing priorities in cross-functional teams.

Developing trust in teams is a strategy for managing risks (Breuer, Hueffmeier, & Hertel, 2016). For instance, the strategy of stakeholder risk analysis offers the opportunity for cross-functional teams to reflect on their priorities, role conflicts, and performances (Parker, 2003). During these team-reflection sessions, the members and manager can be open about past experiences with the customer, suppliers, and other departments, and share internal, sensitive information that can help team members make sense of the project. But these actions can become detrimental when the information travels outside of the team.

For these reasons, cross-functional teams are an interesting context in which to study trust, because team members work in an uncertain and challenging context that they must make sense of and manage. Taken together, the characteristics of cross-functional teams lead to several challenges that trust alleviates. Developing trust in cross-functional teams constitutes an important strategy to manage and overcome these challenges (Bishop, 1999).

How do cross-functional teams develop? The literature on team-development models is extensive, but this study draws attention to three models that are important for this discussion of trust in cross-functional teams: Tuckman (1965), later revised Tuckman and Jensen (1977);
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Marks, Mathieu, & Zaccaro (2001); and Kozlowski, Gully, Nason, & Smith (1999) and Kozlowski & Klein (2000). The aim is not to provide an in-depth analysis of these models of team development, but to emphasize that trust is both an essential part of team-development models and a process independent of these models. While acknowledging that team development and trust development are concomitant and interlinked, their differences are highlighted.

The classic model developed by Tuckman (1965) and later revised in Tuckman and Jensen (1977) explains the interaction of team members by focusing on both the relationships within the team and the tasks that the team must solve. Through the five phases of team development—forming, storming, norming, performing, and adjourning—certain processes develop and certain outcomes are reached, progressively moving the team from one stage of development to another. In a nutshell, this model explains how interactions, attractions, and conflicts between team members develop over time in a linear way, and how trust is essential in the forming and storming phases, when team members start getting to know each other and uncertainties arise regarding team roles, task requirements, and conflicting project goals.

In their attempt to sketch how temporal factors impact teamwork Marks, Mathieu, and Zaccaro (2001) developed their recurring phase model of team processes. In their theoretical paper, the authors propose that teams perform their activities in temporal cycles, episodes that can vary from a couple of minutes (e.g., customer-support teams) to several months (e.g., cross-functional strategy team), depending on the complexity of the task. They further propose that in order to understand how teams work and develop, temporal factors must be taken into account and they differentiate between team processes and emergent states, considering trust in teams as “an emergent state construct that characterizes properties of the team that are typically dynamic in nature and varies as a function of team context, inputs, processes, and outcomes” (Marks et al., 2001, p. 357).
Combining previous theories of team development and adding the multilevel organizational theory, Kozlowski, Gully, Nason, and Smith (1999) propose a multilevel temporal theory of team development. This model includes project performance, time, and the organizational influence (e.g., socialization) on team members. Trust is important in the socialization phase of team development, when team members first exchange information and clarify their roles and responsibilities; and in the negotiating phase, when team members must identify and negotiate their roles in order to achieve their tasks, allowing for a new set of knowledge and skills to emerge at team level and characterizing the way team members interact (Kozlowski et al., 1999). In this view, individual team-member attributes and behaviors combine and compile over time emerging as distinct team-level constructs (Kozlowski & Klein, 2000).

Developing effective relationships within the team seems to be just as important if not more important than team members’ skills and task performance (La Fasto & Larson, 2001). In order to build effective relationships, the team must establish and maintain trust throughout its development (Korsgaard, Schweiger, & Sapienza, 1995; La Fasto & Larson, 2001). While the purpose of this research is not to disentangle trust and team development, it is worth noting that trust is an important component of most team development models (Kozlowski & Klein, 2000), but more than that, trust is a process in itself.

1.3 Thesis Overview

The second chapter reviews the theoretical models adopted to study and measure trust in teams, their assumptions as well as their main drawbacks. The cognitive and affective models of trust (see Section 2.1) are not enough to explain trust development and maintenance in teams. This discussion extends in third chapter, which systematically maps the empirical literature on trust in teams by presenting and analyzing the main insights from previous empirical studies and discussing the ongoing debates of the field: namely, the challenges of
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conceptualizing trust in teams as a quasi-isomorphic construct; the complex relationship between trust, distrust, and control; and the methodological challenges of operationalizing trust in teams.

Insights and challenges addressed in the previous chapters build the foundation for the fourth chapter, which introduces a practice-based approach for researching trust in teams (i.e., actions and interactions, nonverbal cues, and organizational tools and systems) and proposes a model for analyzing the processes of producing and reproducing trust in teams (i.e., signaling, interpreting, negotiating, cooperating, monitoring). This chapter argues that a social-practice approach to conceptualizing trust in teams is a good alternative to shared trust beliefs, because it includes team interactions and organizational embeddedness. The social-practice approach offers a complex view of trust by incorporating meanings, team interactions, nonverbal cues, and organizational embeddedness. In this view, teams are considered social systems rather than a sum of dyadic interactions.

The fifth chapter presents the epistemological and ontological assumptions, methods, and procedures undertaken to collect and analyze data. It describes the purpose of this qualitative research, the author’s role as a researcher, the stages of research, and the methods of data analysis. Next, presentation of the data analysis process focuses on the methods (i.e., qualitative content analysis for categorizing the trust practices that team members, managers and consultants describe; metaphor analysis for interpreting the meaning of trust as a social practice; and interpretive analysis for capturing the emergence and perpetuation of these trust practices in specific team interactions), the phases of the data analysis, and quality criteria.

The sixth chapter presents the meanings and descriptions of trust practices. Its first section on metaphors of trust practices explores the meanings that team members, managers and consultants give to trust in teams, by analyzing five metaphors of trust—recipe, flow, energy, tempo, and improvisation. The next section presents an in-depth description of several
trust practices in cross-functional teams—organizing team outings, developing rules of the game, checking-in and checking-out, and performing lessons learned. And the third section, on production and reproduction of trust practices, analyzes four team interactions where trust practices emerge and are perpetuated through signaling, interpreting, negotiating, cooperating, and monitoring.

The seventh chapter summarizes the findings of this study and discusses their theoretical implications: on the one hand, the consequences of conceptualizing trust in teams as a social practice in general, particularly with regard to the conceptual approach presented in the fourth chapter; and on the other hand, how these findings relate to previous literature on trust in teams. The implications of this study in practical, managerial, and consulting terms and the limitations of this study in operational and methodological terms conclude the chapter, along with perspectives for future research that follow from this study.

Chapter eight offers a conclusion for the study on the value of adopting a practice perspective for studying trust in cross-functional teams. This project demonstrates the opportunities that metaphors and nonverbal cues (e.g., team silence, body language) present for future trust research. Connecting the practice approach with trust metaphors, using metaphors in teams is a trust practice in itself, a practice that future studies should focus more on.
2. Theoretical Foundations of Trust in Teams

Different theories explain how teams build and maintain trust. This section looks at the most widely applied theoretical models for researching trust development in teams—cognitive and affective models of trust (Mayer, Davis, & Schoorman, 1995; McAllister, 1995), the swift-trust model (Meyerson et al., 1996), and transformational models of trust (Lewicki & Bunker, 1996; Zand, 1972)—analyzing their main assumptions, main criticism, and questions that remain unanswered.

Most researchers draw on conceptualizations of interpersonal trust in dyadic interactions to explain how trust in teams develops and is maintained, on the assumption that trust has the same meaning, dynamics, and functionality across all levels of analysis and all referents (Rousseau, 2004; Dietz, 2011). Applying these models to explain how building and maintaining trust happens in a team offers two possibilities emanating from its relationship to interpersonal trust: first, to claim that trust in teams is an extension of interpersonal trust; or second, to assume that trust in teams is qualitatively and functionally different. But the question remains of whether trust beliefs are enough to explain how teams build and maintain trust. Trust in teams is based on interpersonal trust, but its dynamics vary significantly because team interactions have a different and more complex development than dyadic relations (Marks et al., 2001).

2.1 Cognitive and Affective Models of Trust

This integrative model revolutionized scholarly thought on organizational trust and remains the most frequently cited and widely applied framework on trust. First, it synthesizes previous research and proposes a model that explains how interpersonal trust develops between trustor and trustee, emphasizing that trust is not about reducing vulnerability and risk, but about positively accepting vulnerability and expecting that the other will behave in a positive way. Second, it conceptualizes trust as a cognitive construct distinguishing between the antecedents
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(propensity to trust and trustworthiness), the trust belief, the decision to trust, and the trust behavior. Third, it contains a feedback loop to explain how trust behavior reinforces future trust perceptions.

While both positive expectations and the willingness to be vulnerable are at the core of this model of trust, most psychological and organizational research on trust focuses on positive expectations because they are easier to operationalize (Fulmer & Gelfand, 2012). Positive expectations refer to the belief that the other party is trustworthy, and comprise three indicators of trustworthiness: ability, benevolence, and integrity. Ability or competence refers to the other party’s capabilities in terms of skills and knowledge to carry out their tasks and to perform their job; benevolence indicates a personal degree of kindness toward the other party and a genuine concern for the other’s welfare; and integrity reflects the adherence to a certain type of principles acceptable to the other party (Mayer et al., 1995). This is a cognitive or rational model of trust development because trustors evaluate the other party according to these three indicators: ability, benevolence, and integrity.

The cognitive evaluation translates into a decision to trust comprising the willingness to be vulnerable. This means acting based on both perceptions of trustworthiness and on other internal and external factors, such as personal preferences, experience, and organizational information (Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). The information and knowledge that the trustors collect from external factors allow them to make themselves vulnerable not only because of the belief that the other party cares, but also because the other party will perform an action or behavior that is important to them (Rousseau et al., 1998).

The decision to trust does not necessarily translate into an action or behavior. The intention to accept vulnerability and the actual risk-taking behavior are very different concepts and some scholars even consider risk-taking as a totally different concept than trust, and one that should be treated separately (Möllering, 2006). As observable manifestations of trust,
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Gillespie and Mann (2004) have broken trust behaviors into two components: reliance and disclosure. Reliance refers to the extent to which the trustor counts on the trustee’s skills and knowledge and delegates tasks while disclosure is about how much sensitive or personal information the trustor is willing to share with the trustee (Gillespie & Mann, 2004).

This model explains trust as a unidirectional process of gathering information, developing impressions, and making decisions. Trustors look for good reasons to trust in order to make decisions about who is trustworthy and who is not. Contextual information and relationship history are important. In trust relationships, there is always a context and a history, other team members that matter, and a meaning and an interpretation of the interaction and the relationship (Lewicki, Tomlinson, & Gillespie, 2006). Also, the assumption is that trustors always have enough information and time to spend on collecting and developing trust impressions. Perceptions of trustworthiness do inform trustors about which indicators people look for to trust others, but not how they do this. An essential question is how people interpret this information so that it informs a decision (Möllering, 2006).

Trust is assumed to develop in a linear, predictable way as perceptions about the trustworthiness of the trustee lead to the decision to trust, which leads to trust behavior that updates information about the trustworthiness of the other (Lewicki et al., 2006). When it comes to maintaining trust, this model implies that once trust is built, it is rather stable because of the feedback loop. Trust is reinforced when the trustee acts according to the impressions made on the trustor. But this also means that much energy is consumed to maintain trust because trustors always evaluate trustees based on their actions.

In a follow-up article reflecting on their model and the research that followed, Schoorman, Mayer, & Davis (2007) suggest that this framework can successfully apply to trust in other referents such as groups and organizations. “Our model was designed to understand
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the major factors that explain trust from not only the individual level but from the group and organizational perspectives as well” (2007, p. 346).

At the same time as Mayer et al. (1995), McAllister (1995) published another revolutionary work on interpersonal trust, discerning between its cognitive and affective dimensions. Building largely on Lewis and Weigert (1985), McAllister considers trust manifestations based on evaluating either the information that the trustor gathers from the environment—thus, undergoing a cognitive process—or cues from the emotional responses of the other party, an affective process.

The main contribution of the McAllister model is its explanation of trust as containing both cognitive and emotional elements, with different antecedents, and the requirement of a minimum level of cognition-based trust for the affective form to materialize. The model demonstrates that although the cognitive and affective dimensions are interconnected and influence each other, each form has its distinct antecedents and consequences. Empirically, peer-reliable role performance, cultural-ethnic similarity, and professional credentials are antecedents of cognition-based trust, while organizational-citizenship behavior and interaction frequency are distinct antecedents of affect-based trust (McAllister, 1995).

After McAllister, researchers started paying more attention to how trust binds people emotionally. For example, Lewicki et al. (2006) discuss the emotional bond between the trustor and trustee and emphasize that the emotions are likely to influence the cognitive evaluations within the relationship. Williams (2001) also points out that trust involves emotion, and people’s affective response influences their trustworthiness beliefs. Jones and George (2007) have also argued that moods and emotions affect how people experience trust. In their follow-up article, Schoorman, Mayer and Davis recognize the importance of affect for the development of trust impressions.
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2.2 Swift-trust Model

Researchers have found that sometimes team members start their relationships with a high level of trust, so they argue that trust is assumed initially, taken-for-granted as the basis of relationships, and then verified and adjusted (Ford, Piccolo, & Ford, 2017). Sometimes, team members cannot develop trust based on personal experience, simply because they do not have enough time or information, so they use institution-based or routine-based trust. For example, temporary teams, such as virtual, action, and intervention teams, must perform under different time and organizational constraints. These teams function on swift trust, a special type of trust based on professional rules, roles, and practices (Meyerson et al., 1996).

Meyerson et al. (1996) propose that a temporary team interacts as if trust were present, but then must verify that the team can manage expectations. Put differently, with limited time, the team assumes trust initially as a baseline for interaction, and later verifies and adjusts trust beliefs accordingly, based on the work experience. Although swift trust can be a strong form of trust, it is conditional and in need of reinforcement and calibration by actions (Crisp & Jarvenpaa, 2013).

Instead of trust being a process of collecting information, swift trust is created from category-driven processes (Kramer, 1999). Team members will transfer or import their trust beliefs from information they already have (e.g., organizational structure, other co-workers) onto other members of the same department or organization, but whom they do not know personally and with whom they have no history of working together. Thus, team members confer trust in the absence of personal experience, using membership in teams and organizations, professional roles, and rules as a proxies or substitutes for trust.

Swift trust demonstrates that identifying with another team member and categorizing him or her as a member of one’s own team, influences how trust develops within the team, an idea that is in line with psychological research related to social identity theory (Tajfel & Turner, 1981).
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1986). Researchers argue that this shift from personal identity to team identity makes team members more likely to trust others who share membership in the same team or organization (Adams, Bryant, & Webb, 2000). But the downside is that it becomes more likely that team members will engage in stereotyping and be more biased in their judgements of their own team and organization (Brewer, 1995). Also, this makes it possible for team members to reject or disregard information that is not in line with their beliefs about other members of their team, which can have detrimental effects such as those associated with groupthink (Edmondson, 2012).

Professional roles, rules for interactions, and practices are important foundations for developing swift trust. Reliance on clearly defined roles makes trustful interactions possible even when these interactions are relatively isolated and transient, as in project work. Roles provide information about category members, and are both granted and accepted. What is more, they contain information and implicit assumptions about the trustworthiness (e.g. competence) of that team member. For example, a person who occupies the role of team manager appears competent and has the intention of fulfilling the demands of this role. Roles are trust facilitators because they reduce uncertainty about the other team members’ intentions and competencies.

The rules are shared in the organizational environment and enable team members to behave in a trustworthy manner, even without direct contact, because one’s membership in a team or organization implies an acceptance of the implicit and explicit “rules of the game” (Wildman et al., 2012).

Swift trust in teams is considerably less developed and established than interpersonal trust (Adams et al., 2000). Researchers consider that presumptive or swift trust is weak and fragile and depends on communication structures in the team and that it is necessary but not sufficient for communicating trustworthiness (Jarvenpaa & Leidner, 1999). Other scholars think that swift trust is not a “true” form of trust but a substitute for trust—for example, such
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as a risk management strategy that might even inhibit the formation of trust between team members (Mcknight & Chervany, 2006; McKnight, Cummings, & Chervany, 1998). While forming trust impressions in this way requires less time and less effort, it also tends to be less accurate due to shortcomings (e.g., bias, stereotyping, groupthink) of categorization processes (Adams et al., 2000; McKnight et al., 1998).

Nevertheless, swift trust considers the importance of shared team membership, professional roles, and practices as facilitators of trust in the absence of personal experience. But this conceptualization raises questions such as: Where do team rules and routines come from? Who influences them? What is the influence of those using them? Although swift trust offers an important perspective, it does not sufficiently explain how team members develop and maintain trust in interaction.

2.3 Transformational Models of Trust

Trust in teams is assumed to build over time, as team members interact and develop beliefs about each other. The reinforcement model that Zand (1972) developed and Boss (1978) refined offers a good starting point for understanding how trust develops and is maintained in relationships. In his work examining small groups in laboratory settings, Zand developed a reinforcement model that shows how trust and distrust build up over time in the process of interaction, and the importance of initial expectations and actions.

One team member sharing information reinforces another team member perceiving him or her as trustworthy and induces similar behavior. In turn, the other team member is more likely to reciprocate the initial team member’s trust, leading to further actions such as disclosing more information, accepting influence, and exercising less control. This leads to more trusting action and so on. This model explains how trust is a characteristic of the team climate, and depending on the initial conditions (i.e., positive or negative expectations) trust leads to more trust, while distrust leads to more distrust. In Zand’s laboratory study (1972)
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participants assigned to the high-trust initial condition groups were more likely to disclose information, accept influence and reduce control and were thus more effective as a team than participants in the low-trust groups.

Nonetheless, team members do not always live up to the expectations with which they are presented (Lewicki, Tomlison, & Gillespie, 2006). Also, this model shows how trust develops in a laboratory setting, under controlled initial conditions. In practice in cross-functional teams, the process could look different in terms of how information, influence, and control help build trust, because of the inherent contextual boundaries (see Section 1.2). Cross-functional teams always experience an interplay between stability and uncertainty because of member turnover; while some team members are core team members, others are coming and leaving and trust allows for continuity, flexibility, and adaptability.

This framework suggests that trust depends on the successful completion of the trust-information-control cycle, and that if specific factors or people within the organization change, trust is more likely to dissolve, since it can only work in stable organizational environments where team members and processes rarely change. More precisely, reliance on trust will only emerge through repeated interactions over time and persist when team members act accordingly and turnover is low.

Building on previous research, Lewicki and Bunker (1996) conceptualize organizational trust development and maintenance as a progressive, three-stage process made up of calculus-based trust, knowledge-based trust, and identification-based trust. The main assumption of this model is that trust is a transformational process that evolves in line with experience and information about the other. The authors emphasize that the transformational model of trust applies to understanding initial trust development between parties who have no experience with each other, where there is a high level of uncertainty and vulnerability about their professional relationship.
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Within the first stage of a work relationship, calculus-based trust develops between team members. At this stage, trust is more of a cost-versus-benefit type of relationship. In this view, trust develops because of the benefits that team members gain. Consistency of behavior is crucial at this moment, so team members will act according to what they said or promised. This behavioral consistency is enforced by the threat of losing the relationship. The authors underline the fragility of trust at this initial stage of interaction.

As the relationship progresses, it moves into the next stage, that of knowledge-based trust. At this stage, team members can better predict each other’s behavior through direct observation and relationship history. By now, enough repeated interactions between team members have happened to enable interpreting and predicting each other’s behaviors. Through the accumulation of regular communication and information, team members are more likely to understand each other and predict behaviors. Therefore, trust at this point is not so easily broken by inconsistent behavior.

At the third stage, identification-based trust, trust rests on a high level of empathy between team members. After establishing consistency and predictability of each other’s behavior, team members access a new level of interaction where they know, understand, and connect emotionally with each other in terms of values and emotions. This form of trust enables a correspondence of knowledge. The authors mention four types of activities that strengthen identification-based trust, namely, developing a collective identity (e.g., a team motto, a shared vision); being located in the same building or area; creating joint products or goals (e.g., project objectives, new product) and committing to shared values (Lewicki & Bunker, 1996).

Trust develops gradually as team members move from one stage to another, addressing how trust changes within work relationships over time. The main ideas of this model are that trust is an ongoing process that develops in interaction; and trust is not high or low, but qualitatively different from one stage to another. Not all relationships must reach identification-
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based trust in order to be productive; some well-functioning relationships remain in the knowledge-based trust phase. For example, in a team where task interdependence is low, knowledge-based trust is enough to keep the relationships going because team members only require some knowledge about each other’s skills to be productive. There is no need to identify with each other’s values because there is no need to act on each other’s behalf. The opposite applies in a team where interdependence is high. This type of team requires identification-based trust because team members are constantly required to act and decide on behalf of one another.

An important implication for how trust develops in the context of teams is that the shift from one form of trust to the other requires a fundamental change of behavioral and perceptual paradigm. For instance, in moving from calculus-based to knowledge-based trust, a significant shift involves changing from perceptions of differences to focusing on the similarities between team members (Lewicki & Bunker, 1996). But researchers have yet to adopt the transformational model to examine trust in teams (Costa, Fulmer, & Anderson, 2017) because it requires an in-depth exploration. Support for the progression from knowledge- to identification-based trust, but not from calculation- to knowledge-based trust, has been found in trust in coworkers and teammates (van der Werff & Buckley, 2017).

Several aspects of trust are important in the context of transformational models of trust. Trust matters from the beginning, but is supposed to be rather weak initially and expected to build up gradually. It is an input and an output of relationship development. Second, the models emphasize that the parties must get to know each other through mutual experiences. While organizational rules and routines play their role, the relationship depends mainly on the process of developing trust and common expectations over time. Third, the frameworks suggest that relationships will become more stable and robust, once they successfully complete the trust-information-control cycle (Boss, 1978; Zand, 1972), or as they move from calculus-based to
knowledge- and identification-based trust (Lewicki & Bunker, 1996). But when team members and managers are replaced or when assessments turn negative, trust may be lost, expectations may no longer match, and there is always the possibility of dissolving the relationship.

The dissolution of trust relationships deserves special attention in process models such as that of Lewicki and Bunker and Zand. A transformational and self-reinforcing mechanism at work in the sense that trust grows, even spirals, into stronger, deeper more resilient forms once the trust-building process itself has been established. But, as Möllering (2006) discusses, it can also mean that team members and managers become trapped in this cycle as existing states of trust influence perceptions, and at times, trap people in a circular type of logic.

### 2.4 Research Implications for Trust in Teams

In conclusion, three possible explanations are offered for how trust in teams develops and is maintained: through personal experience, sharing membership and team roles, and forming meanings and interpretations. Trust in teams originates in the interpersonal trust beliefs and affects of team members (cognitive and affective models of trust), is built by accumulating information and managing impressions, and is maintained by behaving according to expectations. Another possibility is that trust is based on shared membership, roles, and routines. Team members enter work relationships with a high or moderate level of trust from the beginning, and then engage in an as if kind of trust, in which they assume trust initially as the basis of their work relationships. Because they are members of the same organization or profession, everyone acts in line with their professional roles, and follow institutional rules and routines. These categorization and identification processes allow for the team to function as if trust were present, and later verify and adjust trust accordingly (swift model of trust). The third option is that trust is a complex, ongoing, learning process that develops in interaction along with the relationships and the team. Trust is about meanings and interpretations, about paradigm shifts in the relationships. By learning about each other, as relationships grow and
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transform, team members go from one type of trust to another (transformational models of trust). Trust is maintained through repeated interaction and a constant flow of information (Currall & Inkpen, 2006).

But all these models explain dyadic relations in organizations. Applying these models to understand how building and maintaining trust happens in a team yields two possibilities: to assume that trust in teams is an extension of interpersonal trust or that trust in teams is qualitatively and functionally different. If trust is an extension of interpersonal trust between team members, it is a sum or aggregate of trust impressions about each team member based on personal experience (cognitive and affective models of trust) or it is a team characteristic that develops from shared membership, professional roles, and organizational rules (swift trust model).

Are trust impressions enough to explain trust in teams? How do team interactions influence trust in teams? The team context offers the opportunity to understand how interpersonal trust interactions become standardized, enacted, and perpetuated by team members. This explains why it is possible to maintain trust even when team members and managers change or leave the team. The more interesting proposition however comes from the transformational models of trust: although based on dyadic interactions, trust in teams develops and persists as the relationships between team members grow, qualitatively different in form and function than interpersonal trust. If trust in teams is different than interpersonal trust, it has different antecedents and is more than the sum of team members’ trust impressions. The next chapter systematically analyzes the empirical evidence to understand how to reconcile these two options. What does the empirical evidence show? How is trust operationalized and measured in the literature?
3. Empirical Findings on Trust in Teams

Having reviewed the theoretical models, examining the empirical evidence on the nature of trust in teams follows. A comprehensive overview of the literature on trust in the context of work teams, results in answering the following question: How have previous researchers conceptualized and measured trust in teams? Answering this begins with a systematic review of the literature to determine the nature of trust in teams. Additionally, this review not only maps out the literature but also identifies research gaps that inform this study.

A systematic review is a reliable method for obtaining an overview of the research on a topic, or for bringing together different research strands; using a reproducible, consistent method of analyzing data (Booth, Papaioannou, & Sutton, 2011). Having its origins in medical and healthcare sciences, where it is used to evaluate the effectiveness of interventions and treatments, other disciplines have adopted and adapted the systematic review, including social sciences and management and organization studies (Petticrew & Roberts, 2006; Pickering & Byrne, 2014; Tranfield, Denyer, & Smart, 2003).

This review follows the method developed for management and organization studies by Denyer and Tranfield (2009) and for social sciences by Petticrew and Roberts (2006). The method includes four stages: problem formation, article selection, summarizing, and interpreting the findings.

The first stage, problem formation, clarifies the concepts, the context, and the research question that guide the construction of the search strings. An extensive database of articles was achieved by merging two streams of literature, trust and work teams, and constructing search strings for each term. For example, the Boolean search string for trust is: “trust” OR “trustworthiness” OR “interpersonal trust” OR “benevolence” OR “competence” OR “integrity” OR “uncertainty” OR “risk” OR “vulnerability” OR ”cooperation”. The main search string for teams is: “team* in the workplace” OR “work group*” OR “work team*” OR
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“teamwork” OR “team process*” OR “group* dynamic*” (asterisk for truncated terms). The two streams are merged with AND, followed by focusing next on selection of peer-reviewed articles published from 1970 until the beginning of 2019. Nine databases are selected to ensure data saturation: Academic Search Premier, Business Source Premier, Communication and Mass-Media Complete, Humanities International Complete, SocIndex, Computers and Applied Sciences Complete, EconLit, PsycInfo, PsycArticles, a representative sample for high-impact research published on trust in teams. These specific databases reflect a high publication quality, and present only peer reviewed literature, considered to have a higher level of quality, standardization and reliability than secondary sources and grey literature (Briner & Denyer, 2012).

The 6,943 articles retrieved by title and keywords are screened and all the articles, in which the key terms are variables in the studies are kept, and all others excluded. In total, 328 articles are considered for the review. After obtaining full text copies of the 328 articles, they are read and evaluated as the review methodology requires (Briner, Denyer, & Rousseau, 2009). Based on reading the abstract and the full-text and checking for consistency in the working definitions of trust and teams, a total of 71 articles are determined relevant for the analysis.

In the summarizing and interpretation phase, data is extracted about conceptualization, theory, antecedents and measurement of trust in teams from the relevant articles (N=71). Although using narrative coding software was considered (e.g. R, MAXQDA, NVivo), the articles were analyzed by the author to provide an in-depth, systematic overview of the research area, and not a thematic analysis of the articles on trust in teams. Extracting the relevant data from the articles, focused on specific issues: conceptualization, antecedents of trust, and measurement.
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Summarizing and interpreting the articles produced a clear, more organized picture of what is happening in the literature on trust in teams. Mapping this literature offers a great opportunity to identify research gaps. Where can consistencies be identified, and how does this steer the direction of future research? First, an overview of the research field, presents the patterns and assumptions throughout the literature, concluding with a discussion on the research gaps.

3.1 Overview of the Research on Trust in Teams

Friedlander (1970) published the first study on trust in work teams and since then the number of publications on this topic has been steadily growing, with the highest number of studies published in the last 10 years from 2009 to 2019 (almost 74%) and increasing. When it comes to article type, 77% are empirical and focus on theory-testing, while 19% are empirical theory-building, and 4% are theoretical papers. Of four broad streams of literature, the biggest comes from organizational studies, followed by communication studies (i.e., the impact of computer-mediated communication on trust), project management (i.e., collaboration and conflict management) and information systems (i.e., the effects of remoteness on collaboration and trust in teams).

Recently reviews and meta-analyses on trust in teams aiming to summarize and integrate the state of the field have increased, which means that scholarly work on the topic has accumulated and become a field of its own. This includes a comprehensive review on trust in different referents and at different levels of analyses (including the team level) by Fulmer and Gelfand (2012); a review on trust in work teams as a multilevel construct (Costa, Fulmer, & Anderson, 2017); a meta-analysis on the relationship between intrateam trust and team performance by De Jong, Dirks, and Gillespie (2016); a meta-analysis on the relationship between intrateam trust and team effectiveness by Breuer, Hueffmeier, and Hertel (2016); and
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a review on trust in teams at multiple levels of analysis (Nienaber, Holtgrave, & Romeike, 2018).

Team type is important. The empirical studies focus mostly on ongoing teams at the beginning of their relationship, usually during the socialization phase and are concerned with how team members form impressions of each other, as this is considered a predictive indicator of how they will work together in the future (Piccoli & Ives, 2003). As Figure 2 shows, researchers focus predominantly on trust in two types of teams—ongoing, face-to-face teams and temporary, virtual teams—because comparing how trust evolves differently in these contexts shows how teams deal with perceived risks (Breuer et al., 2016), and how different factors influence the development of trust (e.g., computer-mediated communication, information salience). Other types of teams examined are self-managing teams, cross-functional teams, and top-management teams.

![Team type Diagram](image)

**Figure 2.** Distribution of articles according to team type

However, most of the teams examined are student teams. Seldom do researchers look at teams in working environments, nor do they take into account that these teams are embedded
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in an organizational context that exerts its influence on team and trust development. Gaan (2012) and Lander, Purvis, McCary, and Leigh (2004) are notable exceptions. Gaan analyzes 25 virtual teams working in several IT companies in India, and shows that organizational collaborative tools (i.e., blended approaches, organizational policies, and process orientation) influence team trust and virtual-team performance. Lander et al. (2004) explore in a case study how organizational tools (i.e., communication practices) influence trust building in outsourcing teams, interviewing 17 team members, project managers, and outsourcing managers about their trust practices.

Regarding measurement and research designs, an overwhelming number of studies are quantitative and experimental, and only a few are qualitative. Researchers measure trust in teams mostly using quantitative methods (i.e., surveys, experiments) by aggregating individual responses to the team level after calculating the within-group agreement coefficient under the assumption that trust is a shared belief of team members (Costa & Anderson, 2011). Recent reviews stress that researchers must specify the level and referent (Fulmer & Gelfand, 2012), and be consistent in the level of analysis and the level of measurement with the conceptualization chosen (Chan, 1998).

3.2 Conceptualizing and Operationalizing Trust in Teams

There is no commonly accepted definition of trust in work teams. Team trust or intra-team trust (De Jong & Dirks, 2012); swift trust (Meyerson et al., 1996), collective trust (Kramer, 2010), and trust in groups (McEvily, Webet, Bicchieri, & Ho, 2006) refer to trust in the context of teams or work groups in organizations (Kiffin-Petersen & Cordery, 2003). The literature differentiates based on referent. Intra-team trust is trust that exists within one distinct team (where the referent can be another team member, the team as a whole, or the team manager) and inter-team trust, is trust that exists between two interacting teams (where the referent is another team) (Fulmer & Gelfand, 2012; Nienaber et al., 2018).
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Most researchers assume that trust is an isomorphic construct (Dietz, 2011; Rousseau, 2004), therefore trust in teams is an extension of interpersonal trust; the sum of the interpersonal trust between team members (Fulmer & Gelfand, 2012). For instance, in developing their theory on trust, monitoring, and cooperation in interpersonal and intergroup relationships, Ferrin and colleagues adopt the concept of isomorphism, stating that although trust might differ in structure it has similar functions across levels (Ferrin, Bligh, & Kohles, 2007). Conceptualized as an extension of interpersonal trust, researchers draw mostly on rational and affective models of trust (Mayer et al., 1995; McAllister, 1995), focusing on how perceived trustworthiness indicators (i.e., ability, benevolence, and integrity) enable team members to develop trust with each other. Both dimensions of trust, cognitive and affective, increase the ability of team members to work together (Barczak, Lassk, & Mulki, 2010). Trust develops both through cognitive evaluations and as team members make emotional investments in relationships, express concern for the well-being of others, and come to believe that these feelings are reciprocal (Williams, 2001).

Review papers by Fulmer and Gelfand (2012), Costa, Fulmer, and Anderson (2017), and Nienaber et al. (2018) propose that trust is a quasi-isomorphic phenomenon, that occurs when constructs and relationships function in similar ways at different levels. According to the authors, many of the definitions across levels and referents generally represent trust as including positive expectations of trustworthiness, willingness to accept vulnerability, or both. At the same time, there are differences in the construct at different levels. Trust at the team and organizational levels denotes shared collective beliefs and attitudes from members within a unit. Trust at the organizational level is a shared climate, different from trust at the individual level as an individual’s psychological state (Fulmer & Gelfand, 2012). Trust in teams is complex, multilevel and contains both interpersonal trust between team members and collectively shared trust in the team as a unit. Over time, through repeated team interactions,
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and based on the interpersonal trust between each other, team members develop shared beliefs about the trustworthiness of the team as a whole. Emergent team states (Marks et al., 2001) and compositional models (Kozlowski & Klein, 2000) are possible theories that can explain and measure how trust develops from individual to shared trust beliefs in teams.

But challenges to conceptualizing trust as a quasi-isomorphic concept come from the concept of sharedness. What does “shared” mean and is it realistic to assume that team members have similar perceptions of trustworthiness within the team? What happens when there is disagreement? What are the advantages and disadvantages of having similar perceptions? Research by De Jong and Dirks (2012) points to trust asymmetry and monitoring dissensus in student association teams, while Fulmer and Ostroff (2015) talk about trust convergence and divergence. Naquin and Kurtzberg (2009) demonstrate that perceptions of team trust are lower than the average ratings of individual trust and statistically equivalent to the least-trusted team member. Basing their argument on both the negativity bias and the discontinuity effect, the authors demonstrate that team members focus most on the least trustworthy individual member of a team when making judgments about collective team trust. This indicates that teams develop configurations of trust beliefs rather than shared beliefs of trustworthiness. When trust in teams is explained as the shared beliefs of team members, these can be directed toward different referents—a coworker, the team manager, or the team as a distinct unit—and can have different meanings over time. These trust beliefs exist because of the actions of team members, managers and consultants, because of their interactions, and the organizational systems in which these interactions are embedded.

Conceptualizing trust in teams as shared beliefs of trustworthiness overlaps with the concept of team psychological safety. What is the difference between shared trustworthiness beliefs and team psychological safety? These two concepts have much in common; they describe psychological states involving shared perceptions of team characteristics.
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Psychological safety refers to the shared beliefs that speaking up and admitting mistakes and failures will be valued (i.e., benevolence and integrity toward the team). The concepts refer to the same level of analysis—the team—and all have positive consequences for teams and organizations. Edmonson discusses the two concepts and argues that they differ when it comes to the object of focus, in that while trust is about how a team member perceives others, psychological safety is about how others perceive a team member. As to the concept of trust in teams, she considers it an extension of interpersonal trust and, therefore an antecedent of psychological safety (Edmondson, 2012). Shared beliefs are antecedents or factors influencing trust in teams, but not trust itself.

3.3 Development and Maintenance of Trust in Teams

The empirical studies reviewed, show that team type influences how trust develops is maintained. In ongoing teams, trust develops gradually from information cues and signals. Temporary, virtual teams, with time and project constraints, assume trust initially and then adjust accordingly. Depending on the characteristics of the team, trust in teams takes two distinct forms with distinct antecedents: interpersonal trust between team members (in ongoing teams) leading to shared beliefs at team level, and swift trust (in temporary, project, and virtual teams). As Figure 3 shows, the antecedents of interpersonal trust and swift trust in teams are different.
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Figure 3. Antecedents of interpersonal trust and swift trust in teams

This illustration of the antecedents of interpersonal trust in teams and swift trust shows the different factors that influence how trust develops, depending on team type (Figure 3). In ongoing teams, members form trust beliefs that stem from their own personality (e.g., propensity to trust, personal values, affect), from the characteristics of other team members (e.g., ability, benevolence, integrity), and from characteristics of the interaction between team members (e.g., communication, shared goals). In temporary and virtual teams, team members do not have enough time to build trust beliefs based on personal experience, so they assume trust from professional roles (i.e., categorization, attribution), shared membership (i.e., functional diversity), and team climate (i.e., psychological safety, monitoring).

First impressions play a critical role in perceived trustworthiness for interpersonal trust development in teams. Zolin, Hinds, Fruchter, and Levitt (2004) examined interpersonal trust development in project teams and found that team members indeed rely on early, first
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impressions of perceived trustworthiness when they evaluate how the other team members are delivering on commitments (see Figure 3). This evaluation is critical, especially at the beginning of the team members’ interactions, when reliable information about performance might be lacking or difficult to interpret.

Few studies look at nonverbal cues that are important in making first impressions. Trust in virtual teams is difficult to build because of the absence of nonverbal cues (Cheshin, Rafaeli, & Bos, 2011). In ongoing teams nonverbal cues influence emotion contagion and have a ripple effect (Barsade, 2002). When nonverbal indicators are congruent with the message communicated, research in experimental trust games shows that nonverbal cues inform trust decisions (Oda, Naganawa, Yamauchi, Yamagata, & Matsumoto-Oda, 2009). Genuine smiles, direct eye-contact, and nodding are nonverbal cues that induce trust (Centorrino, Djemai, Hopfensitz, Milinski, & Seabright, 2015). On the other hand, gaze aversion, leaning back, crossing arms, and pauses are interpreted as signals that indicate untrustworthiness (Centorrino et al., 2015).

Several studies by Jarvenpaa, Knoll, and Leidner (1998) offer empirical support that ability, benevolence, and integrity are associated with trust in virtual teams. Additionally, the authors find that communication plays an important role increasing team trust (Jarvenpaa & Leidner, 1999). Information salience and relevance have also been considered important antecedents for the development of trust in teams (Jarvenpaa et al., 2004). Similarly, information symmetry and good communication are described as antecedents of team trust formation (Aubert & Kelsey, 2003).

Williams (2001) presents an affective-cognitive model of trust development highlighting group membership, affect, and perceived trustworthiness as mechanisms for the development of trust in teams (see Figure 3). Through the psychological mechanisms of social- and self-categorization, group membership influences the extent to which members who belong
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to a certain team will tend to trust each other more than they do members of other teams. Additionally, similar group membership is associated with generating positive feelings (Williams, 2001).

Few studies look at how trust in teams is maintained perhaps because once trust is built it is assumed to be rather stable with few changes over time, as it sustains itself through a feedback loop (Schoorman et al., 2007). One such study by Lisa van der Werff and Finian Buckley (2017) tracks cues of trust development during the socialization phase of accountant trainee teams in a Big 4 Irish company. They find in a longitudinal study that coworker trust development is nonlinear, with faster rates of growth at the beginning of a relationship when employees are just getting to know their coworkers. The results of their research show no clear evidence for swift trust, not surprising since swift trust as defined exists in temporary teams. Over time, ability and benevolence have a greater and more consistent effect on the overall trust in coworkers than rules and team identification (van der Werff & Buckley, 2017). Another study by Zornoza, Orengo, and Peñarroja (2009) explores the moderating role of trust in virtual teams in an experimental longitudinal design. Their results indicate that in virtual teams team trust climate (conceptualized as trust perceptions shared by team members) moderates the relationship between group-process satisfaction and group cohesion. From interpersonal trust perceptions, team members develop a shared trust climate when team members’ perceptions converge (De Jong & Elfring, 2007; Zornoza et al., 2009).

Organizational factors also play an important role but this has seldomly been explored. A recent field study by Baer et al. (2017) looks at situational normality and situational aesthetics, and how these influence the perceived trustworthiness of the organization. They find that aspects such as the degree to which the work setting appears customary, with everything in proper order, and the degree to which the work setting has a pleasing and attractive appearance shape newcomer trust formation.
3.4 Trust, Distrust, and Control in Teams

Throughout the literature, the underlying assumption is that the more trust, the better. Trust fosters collaboration and cooperation between team members (De Jong et al., 2016), and a lack of trust translates into team monitoring, duplicating work, and documenting problems (Wilson, Straus, & McEvily, 2006). But upon closer examination, the meanings and interpretations of team members and the phase of project development determine when control is interpreted as positive and expected, building and maintaining trust, and when control is interpreted as negative and means a lack of trust.

Researchers have focused on the positive impact of trust in teams on team outcomes. Evidence from several meta-analyses on trust in teams demonstrates the impact of perceived trustworthiness and propensity to trust, and their direct effect on team effectiveness and team performance (Breuer et al., 2016; De Jong et al., 2016). The findings confirm that team trust is positively related to and has a moderately large impact on team performance (De Jong et al., 2016). The relationship between trust in teams and team performance is stronger in virtual than in face-to-face teams, and weaker when team interactions are documented, as compared to no such documentation (Breuer et al., 2016). It may seem counterintuitive, but the relationship between trust in teams and team effectiveness is stronger in virtual teams than in colocated teams, because virtual teams perceive higher risk, and the need to build trust is thus stronger.

The literature on trust in teams focuses exclusively on trust, but research on distrust in teams is equally relevant and might offer results that could have an important impact on the field (Costa et al., 2017). The systematic review of the literature yielded two interesting studies that analyze the role of distrust in work teams. Lowry, Schuetzler, Giboney, and Gregory (2015) demonstrate in an experimental study that virtual teams in which the initial condition was distrust significantly outperformed all control groups in non-routine decision-making tasks. This is because distrust raises awareness between team members, making them challenge
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each other and raise questions, which is beneficial for creative, nonroutine tasks, but detrimental for standard, routine tasks. Tanghe, Wisse, and van der Flier (2009) show that distrust can positively affect teams, depending on the context and the team tasks, some of which make distrust productive and beneficial for team effectiveness.

There are two perspectives on the relationship between trust and distrust: trust is a continuum or a bipolar construct; or trust and distrust are different constructs. In the first perspective, trust varies from high trust to low trust or distrust, according to the level of experience and interaction between trustor and trustee, and any decrease in trust moves people closer to distrust (Adams et al., 2000). Accordingly, most models of trust development—e.g., the stages of the trust development model (Lewicki & Bunker, 1996) or the conditional and unconditional model of trust (Jones & George, 2007)—imply that trust starts from zero and develops either into high or low trust. Not many theories address what the midpoint of this continuum might be, whether it represents moderate trust and distrust at the same time, or whether a midpoint is actually relevant for trust (Adams et al., 2000).

The second perspective is that trust and distrust are different concepts with different antecedents. Lewicki, McAllister, and Bies (1998) argue that trust and distrust are different constructs. Trust and distrust have distinct antecedents and consequences and consist of different expectations: while trust refers to positive expectations about the behavior of another team member, distrust is about negative expectations (Lewicki et al., 1998, p. 439). In fact, Lewicki et al. (1998) consider that the opposite of trust is not distrust: the two constructs are unique and both range on different continuums from high to low.

Moreover, Lewicki et al. (1998) present arguments for why it is more likely that, in the work environment that entails multiplex and ambivalent working relationships, team members experience both trust and distrust of the same team member for different aspects or tasks and in different contexts. Mayer et al. (1995) also discuss trust as context specific, i.e., a person
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can be trusted in one domain but not in another. For instance, one team member might trust another to perform a regular, routine task, but might distrust the same team member when it comes to a new, nonroutine task. In return, this distrust might actually have a positive outcome on the overall performance of the team, as they might spend less time on monitoring that team member’s activity by assigning the task to a member that they trust, and spend more time on their own task. The authors argue that it is rather idealistic to assume that team members should always trust each other, and that distrust, i.e., monitoring, has a very important part to play in maintaining healthy work relationships (Lewicki et al., 1998, p. 444).

Trust in teams and team monitoring have an intricate relationship that depends on context and meaning. Team monitoring, understood as the extent to which team members check up on each other, is a sensitive issue in teams because it can undermine solidarity and tends to be interpreted as a lack of trust (Langfred, 2004). Team monitoring leads to trust and has a positive meaning in teams when it is expected—for instance, in working contexts where there is little or no information available (Ferrin et al., 2007). Also, trust and monitoring can relate differently at different stages of a project—that is, negatively at the start but positively both in the middle and toward the end of the project (Costa & Anderson, 2011).

Piccoli and Ives (2003) show that trust declines in virtual teams that have control mechanisms in place by increasing vigilance and salience. Costa and Anderson (2011) conceptualize monitoring as a component of trust in face-to-face, ongoing teams. For self-managing teams, team monitoring is important—when team members have a high task autonomy and trust each other and do not monitor each other’s work their team performance decreases (Langfred, 2004).
3.5 Research Gaps

Research has come a long way since 1970 in discovering how trust in teams develops and is maintained. The empirical studies in the last ten years demonstrate that team type, organizational context, meaning, and interpretation determine how trust in teams develops and is maintained. Several gaps in this research area, which this thesis aims to cover, are addressed below.

Team characteristics determine what form trust takes and how it develops and is maintained. But teams exist in organizations with tools and systems that support and influence their development. Little research has focused on the context in which the relationships between team members are embedded and the types of organizational tools and systems that support the development and maintenance of such interactions. Context is important because it determines how trust develops and is maintained (Lyon et al., 2012).

First impressions greatly influence trust building, and first impressions of trust come from nonverbal cues as well (Centorrino et al., 2015). Few studies pay attention to nonverbal behavior, although it is a component of building first impressions (Zolin et al., 2004).

A common assumption throughout the literature is that if teams develop shared trust beliefs, team members will act more trustingly within the team. However, not well understood are what shared means exactly to team members and whether it is realistic to assume that teams develop shared beliefs, or rather configurations of trust. More is known about the factors that influence the development of trust in teams and the relation between team type and trust development.

Most research has focused on how trust is built and not on how trust is maintained in teams—more precisely, which activities and interactions build and maintain trust in teams, and what meanings these activities have for team members. Also, this systematic review reveals that the meanings and the interpretations that team members give to their interactions determine
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what type of actions build trust and what type of actions signify lack of trust (Lowry et al., 2015) and these meanings and interpretations are built in interaction.

Some common ideas emerge concerning the tangled relationship among trust, distrust, and control in teams. The assumption throughout the literature is that the more trust is fostered in teams, the better the team functions (Costa et al., 2017). Recently, a few empirical studies have pointed to the beneficial effect of distrust in virtual teams for nonroutine tasks (Lowry et al., 2015; Tanghe et al., 2009). Also, control structures are important and interpreted positively, depending on the organizational context, the type of team (e.g., in virtual and self-managing teams, monitoring is positive and expected), and stage of the project (e.g., control is interpreted negatively in the beginning of the project and positively in the middle and toward the end of the project).

Researchers have asked team members and managers of predominantly virtual and face-to-face student teams about their perceptions of trust in teams. Very little research focuses on cross-functional teams in practice, although evidence indicates that this is a challenging context for building and maintaining trust (Webber, 2002). The perspective of team consultants, experts in working with different types of teams to build and maintain trust, remains unexplored. The consultants’ perspective is important; while team members’ and managers’ main activity is to perform organizational tasks, the consultants’ main activity is to develop teams and projects (Hamberger, 1992). Team consultants’ perspective becomes vital because they can provide rich accounts of how they help team members and managers build and maintain trust in different types of teams across organizations.

Although conceptualized as a process, trust is most often measured at one point in time, a methodological decision that does not reflect the complexity of trust as a process (Lewicki et al., 2006; Lyon et al., 2012). Researchers take a static and quantitative approach to trust, focusing on the individual beliefs and perceptions of team members regarding team processes
and disregarding observed behavior and team interactions. Qualitative approaches are rare and observational studies are non-existent. Jones and Jones (2011) and Lander, Purvis, McCary, and Leigh (2004) are notable examples of ethnographic studies. This lack of qualitative studies results from the challenges of collecting longitudinal and observational data in companies. But such studies could offer an important contribution to the field by capturing the meanings, the interactions, and the activities, in which team members engage as they unfold in the work environment.

In conclusion, the currently available empirical evidence is largely grounded in the conceptualization of trust in teams as shared beliefs of team members about the trustworthiness of the team as a distinct unit. Much less information exists about the meaning and interpretation of trust in teams among team members, regarding the activities in which they engage to build and maintain trust, and the practices by which trust gets produced and reproduced. A more interesting question than what type of collected information makes team members develop shared beliefs and decide to trust each other is the question of what planned activities engage them in building and maintaining trust and what meanings these activities have for team members.

To address these research gaps, the main assumption this research project is that trust has different meanings over time, as the relationships between team members develop and evolve. The corresponding research questions are: How do members of cross-functional teams (i.e., team members, managers, consultants) conceptualize trust? What are the different meanings that they give to trust in teams? How do these meanings differ according to their role in the team? How can trust in teams be operationalized from a perspective that emphasizes interaction, a perspective that approaches the level of team interactions and activities in which team members engage to build and maintain trust? The next chapter demonstrates that a practice approach to conceptualizing trust in teams offers such an opportunit

Reviewing the theoretical approaches of conceptualizing trust in teams and the empirical evidence makes clear that previous research has not entirely managed to explain how trust develops and is maintained in cross-functional teams. In addition to the type of information that makes team members develop shared beliefs and decide to trust each other, attention is warranted for the activities in which they engage to build and maintain trust and what meanings these activities have for them. Interaction creates meanings and interpretations that develop as team members, managers, and consultants engage in project activities.

This chapter proposes conceptualizing and operationalizing trust in teams from a perspective that emphasizes trust meanings and patterns developed and maintained in team interactions. The social-practice perspective makes it possible to analyze the pattern and meaning of activities that team members engage in to build and maintain trust—specifically, what members of cross-functional teams do and say. The focus here is on the activities and the interaction between team members, rather than on trustworthiness, affect, or institutions as sources of trust information. First, highlighting why practice approaches are studied in management and organizational studies is followed by a description of applying a practice perspective to trust in teams. Then, a model of building and maintaining trust as a practice is presented, emphasizing how this approach addresses the research gaps in this field.

4.1 Practice-theory Approaches

What constitutes a practice approach? Taken together, these approaches offer a new way of understanding and explaining social and organizational processes by describing important features of the social world as actions and interactions (Nicolini, 2012, p. 7). Starting with the 1970s, practice-oriented approaches have become increasingly popular and have been applied to the analysis of phenomena as different as science, policy making, language, culture, consumption, and learning.
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What is the added value? Why study practices? The practice approach moves away from traditional and functional perspectives that explain organizational behavior as stemming from the mind and cognition of individuals or the influence of social systems, and instead offers a focus on the routine interactions embedded in an organizational system. Practice theory questions the idea that there is a clear distinction between micro and macro phenomena and depicts the world in relational networks of practices. Nicolini (2012) highlights the relation between practices and their material conditions—i.e., between “structure and process”—conceptualizing it as a two-way street (Nicolini, 2012, p. 10).

This approach offers an integrative, holistic view of studying organizational processes because structure and agency are no longer seen as one-sided, but rather as complementary, intertwined, and interconnected. Every organizational process is dynamic, connected to everything else so that it becomes difficult to explain organizational processes and systems in a traditional way. This perspective brings forth our bodies and other material tools and objects that sustain and connect practices over time and space. Practices have a normative aspect, because practices mean learning how to act, what to say, what things mean, and what to expect. The advantage of practice-theory approaches is that they enable better descriptions of characteristics of the organizational world as something that is made and remade in practice by tools, discourse, and our bodies.

Researchers are encouraged to be flexible about what the topics of investigation are and which practice theory to choose. But there is overall consensus that practices are molecular units—composed of other smaller elements, such as bodily motions and smaller actions. Practices are configurations of actions, which carry a specific meaning. For instance, moving a hand forward is in itself not a practice, but can become a component of the practice of “greeting by shaking hands.” Practices are more than simply bundles of activities, because they have a pattern and a meaning.
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In order to illustrate the concept of practice, Nicolini (2012) offers as an example the practice of being a competent student in class (i.e., disciplined, silent, and, very likely, passive). The social order that is understood as a class is largely inscribed in the tools that are used (e.g., room setting, the position of the chairs, books), in the way students and teachers communicate (e.g., raising their hands, giving evaluations) and in the bodies of all the participants (e.g., maintaining silence, physical distance), and manifests through these particular tools, communications, and bodily practices.

In this research, practices are recognizable, repetitive patterns of interaction, bundles of activities (Schatzki, 1997, 2005) produced and reproduced by multiple members of a cross-functional team (team members, project managers, team consultants). To study practices does not mean to simply report what team members say or do or to describe the actions carried out by team members, but also to address the meaning of other mechanisms. For practice scholars, the unit of analysis is not just beliefs or actions, but bundles of activities, organized sets of doings and sayings directed toward a goal or a standard. Schatzki (1997) names three main components of practices: understandings, skills and procedures, and goals. Moreover, practices have a path of development in time and space (Schatzki, 1997). Practices are more than activities; practices have a pattern and a meaning of which team members are often unaware, as the performance of a familiar practice.

Nicolini and Monteiro (2017) highlight that practices have certain characteristics. First, practices exist only in configurations (e.g., trust in teams depends on the alignment of other practices such as selecting team members, maintaining the profitability of the organization, paying team managers and team members). Practices only make sense when they are organized around an end or an object, and organize other activities that may not necessarily count as practices. More than that, practices have a collective nature and are common patterns that exist in teams; not just an action in which a team member engages at one point in time, but a pattern
of actions that all team members produce and reproduce over time. Practices are normative in
the sense that team members not only share practices but also hold each other accountable for
completing project goals. Practices are material, as team members initiate, share, and carry out
practices, and also are absorbed by the practice (Nicolini & Monteiro, 2017).

What does this add to our knowledge of trust in teams in particular? Practice theory is
fruitful for the field of trust in teams because it proposes that researchers focus on the activities
that are unfolding in teams, and not just the shared beliefs of team members and the contextual
factors of the organizational system. Analyzing the team activities and interactions better
enables understanding how trust is built and maintained in interaction. Team activities and
interactions allow understanding trust holistically, because we can explain it from multiple
viewpoints: the actions of the team members who are producing trust, how they conceptualize
and practice trust, their body language, and the characteristics of the organizational system in
which they are embedded. Looking at trust in teams from a practice approach considers the
context in which relationships and interactions are developing.

4.2 Conceptualizing trust as a social practice

Trust is a social practice that is built and maintained in the actions and interactions of
team members embedded in an organizational system. Trust as a social practice develops from
the interpersonal relationships between team members, project managers, and team
consultants, and from the organizational system in which these relationships are embedded, so
it is based on the interpersonal trust between team members (i.e., what happens in interaction),
the organizational rules and routines (i.e., what is embedded in the organization), and the
meanings and interpretations attributed to these aspects (i.e., what is socially constructed).

Trust as a practice is a unique component of the team as a social system, because the
interactions of team members produce and reproduce it within the system. Trust as a social
practice is collectively shared, enacted at the team level with the purpose of building and
maintaining trust. In this sense, trust is both a process and an outcome. Trust characterizes the overall pattern of interactions between team members and, in a way, it becomes depersonalized. Although trust develops from dyadic interactions, it characterizes the whole system, and one member of the team leaving (which often occurs in cross-functional teams) will not change the way team members interact.

Over time, trust takes on different meanings and symbols and translates into bundles of meaningful activities. We can observe trust as a social practice in the bundles of activities that team members share, in their team practices, and in the meanings that they give to these activities. Meaning is defined as the interpretation attributed to the behavior of team members, managers, and consultants. Meanings can be positive or negative and, over time, can characterize the system as a whole (Nicolini, 2012). Some bundles of activities are created with the purpose of building trust, others with the purpose of maintaining trust.

Building and maintaining trust are at the core of understanding the specific components and mechanisms by which practices function in cross-functional teams. For example, communicating openly is a way of interacting between team members that can serve the practice of both building and maintaining trust in cross-functional teams. How can we tell if team members trust each other? It can be observed in the way they are interacting with each other and in what they are saying. Observing their activities and interactions—for instance, sharing relevant information and actively listening—leads to the conclusion that they are both building and maintaining trust, depending on whether they are at the beginning of their relationship.

In the beginning of the relationship, team interactions are more related to building trust with the intention to develop trust. Afterward, as the relationships develop, other trust practices maintain the trust that is already there. Therefore, trust practices can serve different purposes; sometimes, a practice can have both building and maintaining purposes. What is more,
sometimes practices that refer to control or monitoring help team members to build trust, but that is not trust in itself. A certain level of monitoring is helpful for building trust, but monitoring is not evidence of trust. For instance, at the beginning of their relationship team members check that everyone understands the project requirements, and this shared understanding enables trust.

Möllering (2006) uses the concept of “leap of faith” to highlight that trust building and trusting are two very different concepts. The metaphor suggests that in order to make the jump and “suspend uncertainty,” team members need to build a stable platform from which to engage in jumping. Without a foundation from which to jump, no action can take place. In other words, in order to engage in trusting, team members need to build trust. How do team members make this leap? The interesting and challenging aspect of trust comes from trusting, so that every trusting practice is, in a way, a trust-building or a trust-maintaining practice. By trusting, team members confirm trust and help to keep it going. So, while sometimes the distinction might not be so clear, there are trust practices that support trust but are not evidence that trust is already there, as in the monitoring example.

Another example is self-disclosure as a trust-building mechanism (Gillespie & Mann, 2004). It becomes part of a practice with the intention to build and maintain trust when corroborated by other activities, such as clarifying roles and responsibilities, clearly communicating expectations, positive body language (e.g., smiling, nodding), and supported by organizational tools (e.g., informal team lunch, team-building exercise). Examples of practice thus range from short patterns of activity, such as trading on the stock market or cooking a meal (Schatzki, 2005), to more durable, organized activities such as scientific experiments and even science as a field (Pickering, 1995). Figure 4 presents a visualization of what constitutes a practice based on the work of Schatzki (2005) and Nicolini (2012).
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What makes up a practice? For the purpose of this research, practices are explained and analyzed as complex team interactions that comprise team communication (discourse), nonverbal indicators (bodily movements), and the organizational tools and systems that support these activities (tools) (Figure 4). The unit of analysis is the practice—not the people, not their thoughts and beliefs, but the activities and the way they are carried out (produced and reproduced). Predominance of some practices over others makes it possible to differentiate and analyze them.

Team communication or discourse refers to what is being said, the verbal communication going on within the team. The type of information that team members share constitutes a part of trust-building and maintaining practices. Team members communicate their expectations, clarify professional roles and organizational rules, check for common understanding of project requirements, and offer feedback on work progress. These activities predominate and are valued over other activities, such as withholding information.

Nonverbal indicators explain how this information is shared, how team members communicate to build and maintain trust. The nonverbal activities are enacted through such media as body language, physical distance and proximity, or gestures and the facial expressions of team members. How team members communicate is just as important as what they
communicate and can build either trust or distrust (for instance, leaning in predominates over leaning back and crossing arms).

Organizational tools and systems support team interactions by offering a communication platform upon which information can be exchanged, a reporting or project-management tool to keep track of the work progress, or a team or project budget for planning team activities. How team members use these tools and the meaning they give them is what constitutes practices of building and maintaining trust.

4.3 A Model of Building and Maintaining Trust as a Practice

How do trust practices emerge and develop? Conceptualizing trust as a social practice or process is not a new idea process. In his chapter on process views of trusting, Möllering (2013) discusses how trust is constantly produced and reproduced by action and interaction. Trust is not an outcome of a process, but rather the process itself. “Process views of ‘trusting’ emphasize that trust is always ‘in process’ and even a process in itself” (2013, p. 2). Möllering notes that trusting as a social process comprises, among other behaviors, signaling, negotiating, reciprocating, or investigating, which help further analyze the development of relationships and the impact that the social environment has on them.

Wright and Ehnert (2010) consider that people are never in any particular state of trust, but are in “a ceaseless and uneven flow of trusting” (2010, p. 109). In their view what is important is the constitution of trust and how this contributes to the overall meaning-making of actors.

Together, these process views of trust emphasize that trust is continuously changing its meaning along with the relationship and the situations.
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Figure 5. Processes of building and maintaining trust

Figure 5 offers an illustration of the process view of trusting, which Möllerings’ work inspired. The model presents a sequence of different collective processes that unfold the practices of building and maintaining trust in cross-functional teams. This model offers a prediction of what might happen in a team interaction and the particular order of the processes by which trust practices are built and maintained.

It is important to note that unlike other models of trust development that highlight dyadic interaction, this model is meant to explain collective trust practices, enacted by all team members and normative in the sense that everyone in the team knows and adheres to these rules; when some members do not act accordingly, other members intervene. This model approaches the team as a system of interactions and explains how trust practices emerge and are perpetuated in cross-functional teams through the processes of signaling, interpreting, negotiating, cooperating, and monitoring.

Signaling refers to the process by which members of a cross-functional team indicate an aspect that they regard as important for the project and the team. It means bringing forth an important aspect on which the team must decide. The most important thing is discussion of the
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topic in a clear and transparent way within the team. Signaling enables building trust because it is a first step starting the team-decision process.

Interpreting is the process by which team members collectively give meaning to shared information. They reach a common understanding of what is required of them as a team in order to move things forward. Interpretation is about finding out what is important to them as a team, and making sense of the information that has been shared within the team in such a way that everyone collectively reaches a common understanding of the project, goals, and requirements.

By negotiating, team members discuss different aspects of an issue in order to reach a mutual agreement and satisfy the interests of the team. Team members either negotiate producing a new rule for interaction and working together, or reproduce an already existing organizational rule by adapting it to their team needs.

Cooperating is the process by which team members agree on a way of working together by either adapting the rules or developing new rules or procedures. Monitoring refers to making sure that everyone in the team follows the rules and understandings. When a team member does not act according to the rules, the other team members will prompt and remind the others what they had previously agreed.

In support of this conceptualization and borrowing from Giddens’ (1984) structuration theory, Sydow and Windeler (1998) present a theory regarding the constitution of inter-organizational trust as an outcome of “the subtle and recursive interplay of action and structure” (Sydow & Windeler, 1998, p. 32). The scholars place this operationalization between the economic perspectives that are undersocialized and the sociological perspectives that are oversocialized. Sydow and Windeler apply structuration theory to look at the sources of interorganizational trust or system trust in building and sustaining financial-services networks in Germany. The authors consider trust to be produced and reproduced by action and
interaction between agents. This means that actions or practices are not possible without structure.

Two concepts from Giddens’ (1984) structuration theory are discussed in relationship to trust: the duality of structure (that it is both a medium and an outcome of action) and the recursiveness of social practices. Trust is then “as much an outcome as a medium of co-operative interaction” (Sydow & Windeler, 1998, p. 37). Structuration theory makes it clear that inter-organizational trust is “an outcome of social practices, which are often rooted in the practical consciousness of an actor, and that it is often the unintended by-product of otherwise unintended action” (Sydow & Windeler, 1998, p. 54).

4.4 Filling in the Research Gaps

Conceptualizing trust in teams as a social practice that goes beyond the mental and social processes happening at the individual level, is a new approach. In this view, trust within the team becomes a routine or a practice that is constantly produced and enacted by its members. Cross-functional teams are open, dynamic systems where practices are produced and reproduced in interaction. The emphasis in this conceptualization is on the social practices within the team, rather than on the mental processes of team members or the organizational structures that influence these processes (e.g., Costa, Fulmer, & Anderson, 2017).

Because previous research partly explains trust development and maintenance within teams (see Chapter 3.5), the social practice approach adds an important perspective to the field. Trust in teams as a socially constructed practice, the meaning of this process, and what makes it possible for team members to work together are understood in a new way. By looking at trust from a practice perspective, factors such as tools (e.g., kick-off workshops, team exercises, presentations, communication systems), body language (e.g., silence, physical distance), and communication practices (e.g., asking for approval), which had been previously disregarded, are brought forth.
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These practices are important because they allow us to understand the network of activities and interactions that characterize the team. When viewed as a practice, trust in cross-functional teams becomes operationalized through several trusting practices, that develop, are negotiated and enacted, and characterize the system as a whole. More precisely practices that build and maintain trust predominate over other activities that characterize the team as a whole. And the model of trust production and reproduction (Figure 5) offers a framework that explains how trust practices are adopted and enacted within the team.

Thus, this study approaches the team as a social system rather than as a sum of dyadic relationships, looking at predominant patterns of interactions that consist of tools, discourse, and body language, making it possible for trust to develop in cross-functional teams through the processes of signaling, interpreting, negotiating, cooperating, and monitoring (see Figure 5). To look at trust practices in cross-functional teams means to explore meaningful patterns of activities: what and how team members and managers communicate and interact and the organizational tools and systems that support these activities. This approach allows for a rich and contextual view of trust in teams, explained beyond shared beliefs of trustworthiness.

Nicolini and Monteiro (2017) emphasize that scenes of actions are occasions where patterns of actions manifest themselves, meet, intersect, collide, and work together more or less successfully. By scrutinizing these sites, researchers can document how practices are actually accomplished, extended in time, and reiterated through doings, sayings, bodily movements, and organizational tools and systems. In rare instances, how practices are disrupted and even interrupted becomes apparent.

Witnessing scenes of action as they happen is critical for studying practices (Nicolini, 2012). Direct observation of scenes of action is the preferred method of inquiry to study practices, for two main reasons: first, because practices look very different when observed in the present than when they are recounted in the past (Warde, 2005); and second, because
practitioners tend to take for granted critical aspects of their activity (Schatzki, 1997).

Conceptualizing trust from a practice perspective enables understanding of trust in teams to advance in several ways. It allows moving beyond shared perceptions of trustworthiness and looking at trust in context by including actions and interactions, nonverbal cues, and organizational tools that enable this practice to emerge. Also, when studying trust as a practice, the team is considered a distinct social entity with networks and configurations of interactions, rather than a sum of dyadic interactions. This adds complexity as a result of focusing on social practices that characterize the system as a whole, and not just on the dyadic interactions within the system, continuously developing and constituting themselves. This perspective enables better answers to the following research questions: How are trust building and maintaining practices conceptualized and produced in cross-functional teams? What meaning do team members give to trust practices and how are these practices produced and reproduced in cross-functional teams? What activities do team members engage in to produce and reproduce trust in teams? How do they build and maintain trust in teams?
5. Methodology

This section presents the epistemological and ontological assumptions, methods, and procedures undertaken to collect and analyze data. It describes the purpose of this qualitative research, the author’s role as a researcher, the stages of data collection, and the methods of data analysis. This thesis has field research as its broad qualitative approach. The essential idea is that the researcher goes “into the field” to investigate specific aspects of complex phenomena, i.e., trust practices in cross-functional teams.

The underpinning of epistemological and ontological assumptions led the author to take a qualitative approach to data collection. Inherently multi-method in its focus (Flick, 2014), qualitative data collection involves a variety of different methods, including semi-structured interviews, expert interviews, and non-participant observation (Denzin & Lincoln, 2003). As discussed later in the chapter, the empirical data for this research were collected through semi-structured interviews and nonparticipant observation of the kick-off workshop of a cross-functional team. These two methods complement each other by offering information about both the opinions and the behaviors of members of cross-functional teams.

Finally, the data-analysis process is presented, focusing on the methods used: qualitative content analysis for categorizing the trust practices described by team members, managers, and consultants; metaphor analysis for interpreting the meaning of trust as a practice; and interpretive analysis for analyzing how trust is produced and reproduced in team interactions; the phases of the data analysis; and quality criteria, the validity and reliability of the analysis.

5.1 Methodological Approach

The data for this research project was collected by means of semi-structured interviews and nonparticipant observation. While interviews provide insight into the thoughts and opinions of team members, managers, and consultants about trust practices, the nonparticipant
observation yields information about the interaction patterns occurring within a cross-functional team over the course of a kick-off workshop.

One of the key qualitative research methods, interviews offer researchers the opportunity “to explore in detail the experiences, motives, and opinions of others and learn to see the world from perspectives other than their own” (Rubin & Rubin, 2012, p. 3). Taking the interviewee perspective is a key feature of inductive research. Whereas in deductive or positivist approaches, the researcher sets the boundaries, in inductive research it is the participant who is given the flexibility to reflect on the meanings and beliefs experienced in a specific context (Denzin & Lincoln, 2003). Therefore, by collecting data from semi-structured interviews (N=15), the author was able to acquire a flexible framework and combine previous research findings on trust with the meanings and experiences of the interviewees.

Another popular method of qualitative data collection is the observation (Given, 2008). Merriam (2009) points out that the act of observing in order to understand surroundings and behavior is natural, “an observation is a research tool when it is systematic, when it addresses a specific research question, and when it is subject to the checks and balances in producing trustworthy results” (2009, p. 138). In contrast to interviewing, that happens in different locations depending on the availability of the interviewees (e.g., public spaces, offices), observations take place in the setting where the phenomenon of interest develops.

To understand the practices of building and maintaining trust through the actions and interactions of team members, managers, and consultants, the author observes a newly-formed cross-functional team in action during a two-day kick-off workshop. Usually, during a kick-off workshop, team members are expected to organize the project in an effective way, start building good rapport within the team, and start planning the execution of the project (Hamburger, 1992). This is an important phase because it determines the future performance and success of the team (Hackman, 1998; Hackman, 1987; Kozlowski & Bell, 2003).
Combining the data from the interviews and the observation enables a better understanding of how team members, managers, and consultants describe and interact to build and maintain trust. This research is about trust practices in cross-functional teams and the focus is on trust interactions within organizations, between people who are part of cross-functional teams and have different roles and functions. Research on trust in teams has consistently focused on survey data from student teams (see Section 3.5). In order to address this, this study focuses on interviewing practitioners and on observing a cross-functional team in action. Importantly, the sample of participants interviewed is different than the team observed.

Following is an outline of the epistemological and ontological assumptions of this research project and the rationale for a qualitative, interpretive approach to support the research objectives. Next, the chapter presents the sampling procedure, the preparation for data collection, and an account of the data collection and the data-analysis process.

5.1.1 Epistemological and ontological assumptions

All research endeavors aim at producing knowledge about natural and social phenomena (Little, 1998). Epistemological and ontological assumptions are central to the philosophy of research. Epistemology refers to the nature of knowledge, whereas ontology raises questions about reality (Given, 2008).

Epistemology requires the researcher to consider the way in which knowledge is produced and the type of knowledge that exists (i.e., what are the facts?), while ontology raises questions about the way the researcher sees the world, whether reality is objective—that is, external or socially constructed—or subjective and only available to be looked at from multiple perspectives (Della Porta & Keating, 2008). For instance, in the natural sciences, the main assumption is that reality is objective, and the researcher tries to find the right tools to define and measure it. In the humanities, the main focus is on human subjectivity and only empathetic knowledge is possible (Della Porta & Keating, 2008). In the interpretivist approach, objective
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and subjective meanings are combined and people are considered meaningful actors; subjective meaning is the essence of this knowledge; therefore, the aim of researcher is to explore the meanings that underlie their actions (Little, 1998).

The research questions of this project are in line with the interpretive epistemology. As highlighted in the theoretical chapters, the complexity of trust in team, its characteristics, and the process of developing trust practices in cross-functional teams concern sensitive, ambiguous, and challenging concepts to operationalize. Additionally, trust in the context of teams has rarely been studied empirically from a qualitative perspective. Previous studies have not provided enough information about how trust in teams is described and practiced by different members (see Chapter 3.5). The aim here is not to evaluate the effectiveness of trust practices in the context of cross-functional teams, but to explore the meanings and the interactions of team members, managers, and consultants in order to describe these practices and examine how they emerge in a cross-functional team context.

Cross-functional teams consist of team members, managers, and consultants who work together constantly to co-create meaning. The meaning that they give to their work relationships is socially constructed, and their perceptions of how trust practices emerge within their teams will depend on their experiences and interpretations from working within specific project teams. This study aims to describe and explain in detail the interpretations and interactions of team members, managers, and consultants concerning trust practices in a specific context and at a certain point in time.

5.1.2 Field-study approach

The aim of this thesis is to examine the concept of trust as a practice in cross-functional teams from the viewpoint of the main people involved: team members, managers, and consultants. To achieve this goal, the field study is an appropriate qualitative approach (Flick, 2014). In a field study, the researcher uses a combination of methods methods—in this case,
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interviews and observations—to understand how participants describe trust as a practice in cross-functional teams.

In this approach, the researcher relies on participants’ own perspectives and behaviors, since the main assumption is that reality is socially constructed, and their perceptions and interactions are the most important. The goal is to identify how they conceptualize and describe trust practices and examine how these practices emerge in specific team interactions. So, the data from interviews offer insights into how team members, managers, and consultants understand and describe trust practices, while the observation of a team during a kick-off workshop illustrates how these practices emerge through the actions and interactions of team members.

5.1.3 The role of the researcher

In qualitative studies, the researcher’s subjective experience, personality and knowledge are present in all aspects of data collection and analysis, unlike quantitative studies where the voice of the researcher remains objective and neutral (Denzin & Lincoln, 2003). This means that the researcher plays an (inter)active role in collecting and, thereafter interpreting the information and even serves as the main instrument of data collection, analysis, and interpretation.

The author of this study is a trained psychologist, who has previously worked in several cross-functional teams where trust was a challenge, and these experiences were a motivation to understand how trust practices work. Her role in this thesis is that of a reflexive investigator who, through interacting with practitioners and observing the emergence of trust practices in a team during a workshop, aims to paint a picture of a complex phenomenon.

Having this previous work experience, the author was able to relate to what the team members described, the professional jargon they used (e.g., B2B means business to business), and different types of organizational processes to which they referred (e.g., HR practices such
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as organizational induction, performance-appraisal system, job-rotation system). During the observation, she felt comfortable and confident because she was familiar from previous work experience with the activities, practices, and procedures in which the cross-functional team was engaging. While the role as an observer was acknowledged at the beginning of the workshop, after that her presence did not much affect the way the workshop proceeded, since all participants engaged in the team activities and the attention shifted to the team manager and the consultant.

Throughout the entire process of data collection, transcription, coding, and analysis, the author used her personal knowledge and experience as tools to make sense of the material. She collected, transcribed, coded, and analyzed the data herself, and therefore was aware and acknowledges that some of the tools used were her own unique impressions that she wrote down in a personal research journal.

5.2 Sampling

Trust is a sensitive issue to research (Lyon et al., 2012) and the private companies were rather ambivalent about a project on this topic. In the first year of her PhD, the author approached over a dozen companies, and each time got the same feedback, that the topic was very interesting, but they would not agree to have their teams interviewed and observed. Some of the managers even replied that whatever strategies they use to build trust in teams somehow work, and they do not want to investigate this further.

The author then decided to collect data in a different way, by first interviewing people on this topic, hoping that by building rapport and gaining their interest, she would convince them to grant her access to a team. This proved to be a successful strategy, and through one of the team consultants interviewed, she managed to secure a collaboration with a consulting company.
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5.2.1 Interviewees sampling and selection

The participants for the interviews were selected according to a criterion-sampling strategy intended to provide richness of information about trust practices in cross-functional teams (Patton, 2002). They were selected using the following criteria: extensive professional experience (>10 years), working in cross-functional teams in multinational companies as team member, manager or consultant; and English fluency. Participants with broad experience were selected in order to tap into their vast knowledge of teamwork and trust practices, and the author ensured that they had worked in various cross-functional teams across different industries so that they could offer rich input. As highlighted in Chapter 2.2, team roles are proxies for trust (Kramer, 1999; Meyerson, Weick, & Kramer, 1996), so she selected participants occupying team member, manager, and consultant roles in order to capture multiple perspectives. Team consultants have a different view of the process than team members and managers, and previous research has overlooked their perspective (see Chapter 3.5). Consultants are usually facilitators in the process of team development, and the author made sure to include a broad variety of consultants who could offer wide-ranging perspectives on trust in teams. Moreover, English fluency was specifically chosen as a criterion in order to maintain language rigor, and ensure accurate data collection and analysis (Smith, Chen, & Liu, 2008).

Participants were recruited through the professional network LinkedIn because the author was familiar with it from previous work experience. She searched for profiles of professionals that matched the criteria described above and, upon identifying a suitable profile, sent a request to be added to that professional network, along with a short message about the research project, the topic, and the duration of the interview.

The aim was to have a very diverse sample and capture a variety of ideas and opinions about trust practices in cross-functional teams. Over the course of four months, the author
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contacted more than 65 professionals of whom 20 replied, and 15 were interviewed from June to September 2015. The participants worked in different companies, across a variety of industries from management consulting to engineering and higher education. Of the 15 interviewees, 5 worked as team members, 5 as managers, and 5 as consultants (N=15, eight females, mean age=38). The participants were very diverse in terms of nationality (2 were German, 13 of other nationalities). Table 1 shows a detailed description of the characteristics of the interviewees.

<table>
<thead>
<tr>
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<td>Management consulting</td>
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</tbody>
</table>

Table 1. Description of the interviewee sample

The team members who took part in the research project offered detailed information about trust practices in cross-functional teams, while focusing predominantly on the context of the teams, the tasks, and the project deadlines. Although they were very open to sharing information, some of the team members emphasized that the issue described is quite sensitive and asked for reassurance that the data would be kept anonymous and confidential. Additionally, three of the team members interviewed did not want to offer any identifying information about the company or the team project they referred to during the interview.
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Most of the managers interviewed were working in the area of management consulting, which they recognized to be very dynamic and challenging for building teams and trust. The managers were interested in discussing trust, especially the topic of maintaining trust in teams. The interviews with the managers were quite focused and were the most difficult to plan because they could only meet during lunch breaks.

The consultant interviewees worked in management consulting. Some had their own business, others worked as freelancers and had been designing team trainings and project kick-off workshops for most of their careers. They had been concerned with the topic of trust in teams for a long time—either the teams struggling with trust issues that must be repaired, or teams at the beginning of their interaction wanting to start with a good foundation for trust. Taking part in this research project gave them the opportunity to reflect on their work and their experience with building trust in teams. They asked questions about how to actively build trust within teams and felt that they gained important insights into the topic.

Initially, the author had set out to observe the same participants she interviewed, in order to interpret their views together with their interactions. This was not possible due to limited access, but one of the consultants interviewed granted the author access to observe a newly-formed cross-functional team during a kick-off workshop.
5.2.2 Team selection and sampling

A cross-functional team was selected for the observation using a mix of typical-case sampling and convenience-sampling strategy.

Typical-case sampling is a useful strategy since the aim of this research is to offer an understanding of how trust practices emerge in average cross-functional teams (Denzin & Lincoln, 2003). This particular team was chosen over four other teams because it fulfilled the criteria of a typical cross-functional team: functional diversity and interdependence of team members; temporary project with a high level of risk and complexity; and multiple reporting involved, from client to company stakeholders, managers of different departments, and project managers (Parker, 2003). The author observed the team in its initial phase of development and during a critical time in the development of a team, when trust does or does not develop.

The way access to the team was gained was the result of convenience sampling, because the company had to agree that an external researcher would observe one of its teams for two days. The author secured collaboration with a consulting company whose core activities included designing and delivering project and team-development trainings. Subsequently, in December 2015, the consulting company was contracted by a large automotive-supply company to design and facilitate the kick-off workshops for several of their teams. In this context, the consultant asked for permission to bring an external observer to document the development process. As the company agreed, the author discussed with the consultant which of the four workshops that the company was delivering would match the criteria of a typical cross-functional team, where she could observe and take field notes.

Table 2 below offers a detailed description of the team background and composition. The cross-functional team consists of 12 members (N=12, 2 females, mean age=45); 10 are German, and 2 belong to a different nationality. The team members and the project manager had tenure of more than five years working for the company, and all were proficient in company
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processes. Some had previously worked in other cross-functional team projects; for others, this was their first experience with a complex project. Some knew each other already, while others had just met there. The project manager did not know them all. The project manager presented the team-member selection process, namely, each department manager nominated a person who had the skills and the time availability to participate in this project (see Table 2).

<table>
<thead>
<tr>
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<th>Nationality</th>
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<td>Team member</td>
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<td>male</td>
<td>Consultant</td>
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<td>German</td>
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Table 2. Description of the members of the team observed during the workshop

Typical of a cross-functional team, the project was highly complex, with an estimated duration of three years. Its main objective was to develop a new product for a major client in the automotive industry, involving 14 departments in 4 countries and 3 plants, for production in Ukraine, Morocco, and China. The main stakeholders were the internal stakeholders (i.e., project owner, board of directors) and external stakeholders (i.e., project managers, department managers). Moreover, the supplier and the customer had a long-lasting business relationship; the two had been working together for more than 20 years. The project was won after a competitor had failed to fulfill client expectations. The estimated project lifecycle comprised six phases: planning, implementation, development, production, delivery, and maintenance. At the time of the observation, the project was in the planning stage.

The main challenges and risks involved in the project are presented below. The team had to cope with new software, a new product, and new ways of working for and with the
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There was an important issue of distrust because of sensitivity of data exchange between Europe and China (i.e., the client wanted to prevent information about the product leaking into the Chinese market). The team had to find solutions to deal with production and sales costs that were too high for client requirements. In the project-planning phase, there were not enough human resources to cover project demands (i.e., hiring people, opening a new production site in Ukraine). The team expressed difficulties in coping with intercultural communication, including difficulties in working with Morocco and China because of cultural dissimilarity, and in building rapport with colleagues. At the macro-level the political and economic instability in Ukraine and Morocco made an important impact on the success of the project.

5.3 Developing Instruments for Data Collection

5.3.1 Preparing for interviews

The decision to use semi-structured interviews as the method of data collection was made at the beginning of the research project. Since interviewing is about subjective meaning, this method is in line both with the aims of the thesis and with the epistemological and ontological assumptions discussed previously (see Chapter 5.1.1). From among the different types of interviews (e.g., structured, in-depth, narrative), the semi-structured interview was chosen because it offers a degree of flexibility while acknowledging several premises that the researcher brings to the research (Flick, 2014). Semi-structured interview techniques combine an open approach to data collection with more specific questions relating to points discussed in the literature. Employing a semi-structured interview approach enabled comparing participant perspectives using a framework derived from the literature—the interview guide—that was the same for all participants (Merriam, 2009).

In constructing the interview guide and preparing for the interviews, the author reflected on her active participation as a researcher in producing the data and the interaction with the participants. In this sense, both the interviewer and the interviewee have their own
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personalities, beliefs, and experiences, and co-create the research data (Given, 2008). Rubin and Rubin frame their approach as the responsive interviewing model “rather than emphasizing detachment, responsive interviewing encourages building a relationship between researchers and conversational partners (. . .) this assumes that people interpret events and construct their own understanding of what happened, and the researcher’s job is to listen, balance, and analyze these constructions in order to understand how people see the world” (Rubin & Rubin, 2012, p. 10). This means that the personality and expectations of the interviewer are also part of the process.

Preparing for the interview by designing an interview guide and doing a pilot study, the author reflected on the role of “interviewer” and paid attention to implementing specific interviewing skills, such as actively listening, summarizing, and reflecting. Actively listening refers to how the interviewer fully concentrates on what the participant says during the interview, while putting aside his or her own emotions or ideas (Given, 2008). Summarizing enables the interviewer to bring together key ideas and themes regarding the most important aspects of the topics discussed and provides focus and continuity to the interview. Reflecting is a skill requiring the interviewer to repeat back to the interviewee what has been heard, in order to confirm understanding of the concept, and this in turn translates into more disclosure from the interviewee (Rubin & Rubin, 2012).

5.3.2 Developing the interview guide

The author used reflective techniques to understand how team members, managers and consultants describe trust practices in cross-functional teams. This method allows for rich insights into the perceptions and interpretations that people give to past events without forcing respondents to adhere to a specific framework (Flanagan, 1954; Rubin & Rubin, 2012). To make sure that the stories were grounded in first-hand experiences, participants were asked to
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talk about real teams and not hypothetical or implicit theories they had about trust. Again, the focus was on their perceptions and their experiences of trust practices in cross-functional teams.

Previous research and the conceptualization of trust as a social practice guided this research. The interview guide was structured around these topics: team context and first interactions (organization, project, and team characteristics); activities and team interactions (signaling, interpreting, negotiating, cooperating, and monitoring), and task completion and reflections (see Appendix A, Interview guide).

Following this structure throughout the interviews, the author also maintained a flexible mindset; each time a participant mentioned something he or she thought was important, the author encouraged the participant to talk more about it. The interview started with thanks to the participant for taking an interest in the research project, presentation of the professional background of the author (as researcher), and building rapport and creating an open and relaxed atmosphere by offering from the beginning information about the structure of the interview and the topics to be explored (Merriam, 2009).

The first part of the interview was meant to build rapport with the interviewee and to understand the background of the participant, the cross-functional team, and the organization in which they were embedded. As Rubin & Rubin (2012) recommend, the interview started by acknowledging the expertise of the participant and asking questions about work experience and what the interviewee likes most about his or her work. This was followed by questions that were easy for the participant to answer, such as how he or she would describe a successful and an unsuccessful cross-functional team, and what role trust might play. Discussions about the meaning of trust in teams and how it manifests developed from the question: How do you recognize trust in your team? The participant was asked to think about a team of whom he or she was proud. This would become the focus of the interview as discussion of the context of this team ensued. The interviewee would present the company (kept anonymous) in which the
team was embedded, followed by discussion of the structure and the purpose of this cross-functional team.

The main part of the interview explored the way the participant felt about working with that cross-functional team and the different trust practices that emerged in that team. Accordingly, the interviewee and the researcher would explore how the team started off and what type of trust practices they had developed; how team members interacted to build trust (e.g., clearly communicating expectations, defining roles and rules); how information was shared; how the team managed uncertainty and vulnerability as key aspects of trust (see Chapter 2.4); followed by exploration of the team actions and behaviors described as sustaining trust practices (see Chapter 4.3 on signaling, interpreting, negotiating, cooperating, and monitoring).

Then the interviewee and the researcher discussed team performance and how project tasks were completed, also reflecting upon the way they perceived team interactions and project completion. The interviewee was encouraged to think about what knowledge had been gained about trust from the experience of working in that cross-functional team. In addition, interviewees were always asked for anything else they would like to add, perceptions about the interview, and suggestions or feedback.

At the end of the interview, the interviewee was thanked again for his or her time and availability, asked for any additional reflections about the experience of being interviewed, and usually expressed interest in receiving the findings of the research project.

5.3.3 Pilot study

A pilot study was part of the construction of the interview guide, conducted at the author’s university with two of her colleagues and aimed at examining several elements regarding the interview guide and precise framing of the questions. Piloting the interview ensured that the questions were easy to understand and cohesive, and that the order in which
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they were presented made sense for the interviewee. Additionally, the pilot ensured that the language was both neutral and comprehensive, and enabled the author to examine whether certain questions required additional follow-up (Patton, 2002; Rubin & Rubin, 2012).

The pilot study prompted rephrasing and changing the order of some questions. For example, most of the initial questions contained theoretical concepts such as “How were roles and responsibilities communicated?” That was rephrased as “Did everyone know who was doing what?”

5.3.4 Preparing for the observation

Different types of observation depend on the relationship between the observer and the observed (Merriam, 2009). For the purpose of understanding how trust practices emerge within a cross-functional team while staying separate from the activities observed, the author implemented an open observation, and her activities as an observer were presented to the team. She was present, visible in the conference room the whole time, sitting at the table with everyone; however, she was not in what would be considered an active, participatory role.

Regarding preparation, the author trained beforehand to become a skilled observer, just as she did to be an interviewer. She asked fellow researchers who had done observations for their PhD projects to share their experience. She also did a pilot observation study by observing a YouTube video of a team meeting, practicing paying attention to what was being said and done and writing down the behaviors of the team members and their interactions. The actual kick-off workshop proved more challenging, since she had to learn and adapt very quickly to the names of the participants, project characteristics, abbreviations, and technical language.

5.3.5 Field notes and observation sheets

Based on the theoretical framework (see Chapter 4.3), the interview guide, and information received from the consultant (i.e., structure and planned activities of the workshop), the observation sheets were constructed to structure and focus attention on relevant
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aspects of trust practices (see Appendix B, Observation sheet). The theoretical framework and components of trust practices (see Figure 3) include interactions between participants, verbal communication (e.g., sharing information, clarifying roles and responsibilities, communicating expectations, giving feedback) and nonverbal communication (e.g., active listening, positive body language, physical distance, sustaining pauses and silence). The observation took place over the course of two days and included both the formal activities (e.g., team development, project management, stakeholder analysis) and the informal activities (e.g., coffee breaks, team lunch, team dinner). During the whole time, the author wrote down rich, descriptive field notes about the team interactions during the two-day kick-off workshop (see Appendix C, Sample field note).

Unlike the interviews where everything was tape-recorded, during the observation the author wrote down keywords of what was happening, who was saying what, and how the participants were interacting. While the aim was to get a structured account of what was happening, she quickly realized that she could not possibly observe everything, nor should she try. Not everything could be written down, and she had to accept early on that much knowledge from the theoretical review and the interviews shaped and filtered her perception of what she observed (Merriam, 2009).

5.3.6 Ethical considerations

As this research project deals with human participants, it must manage the conduct of ethical research. During the data-collection process, the author obtained an online ethics certification in protection of human subjects from the Collaborative Institutional Training Initiative, Miami, USA (www.citiprogram.org). The ethical issues most relevant for this research project—informed consent, protection of participants, and voluntary participation—are discussed below.
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Participants were fully informed about the research project, the methods used to collect the data (i.e., interviews and observation) and the fact that the information they provided will only be used for scientific purposes. Every participant in the study was asked to read and sign the informed written consent (see Appendix D). The consent form explicitly informed about the purpose of the study, the participants’ role in the data-collection process, the duration of the interview/observation, that the interview would be audio recorded and field notes would be written, and that all the information recorded would be used for research purposes only, as well as being kept anonymous and confidential.

The research team (comprising the author and the thesis advisors) are the only people with access to the research data collected, whose confidentiality and privacy the author ensures. All interview and observational data will be kept confidential and stored for five years on an external hard drive with restricted access, made available only to the people who are part of the research team and agree to the terms of using and analyzing the data. The hard-copies of the informed consent forms will be stored for five years in a lock-secured cabinet.

As a researcher observing the team, the author signed a nondisclosure agreement, taking responsibility for not sharing any information about the strategy of the project, the team, or the company, to ensure confidentiality and anonymity of information. Therefore, any references to the names of organizations, consultancy companies, or clients have been omitted. The names and surnames of team members and managers mentioned during discussions were replaced with letters meant to ensure anonymity.

Participation in the research project was voluntary. The participants were informed at the beginning that if there were any questions that they did not want to answer, they were free to decline. Also, they were specifically told that they could stop the interview and the observation at any time it became uncomfortable for them. This worked well for the interviews; however, it was a bit different for the team observation. Group pressure to conform can possibly
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lead to remaining silent, even though one is not so comfortable with what is going on (Merriam, 2009). As an interviewer and an observer, the author ensured that they were as comfortable as possible with the situation (see Chapter 5.3.2).

5.4 Data collection

Interviews were conducted in English, lasting between 40 and 80 minutes, and were audio recorded and afterward fully transcribed prior to the data-analysis phase. The author transcribed all the interviews herself, using the software tool F4. The process of listening several times to an interview and writing it down proved to be a useful exercise that not only helped her become more familiar with the data prior to analysis, but also enabled her to become a better listener and interviewer. The interviews took place either in public spaces (e.g., cafes, restaurants) or in the participants’ offices in Germany and Singapore.

For the observation, the author wrote notes, since no video or audio recordings were possible. The kick-off workshop took place in the conference room of a hotel in Germany, over the course of two days, and the language of communication was English. Field notes were also written in English. Again, transcription of all field notes in preparation for the data analysis was done by the author, who went several times through the material and reflected upon what had happened during the observation. This helped her to become more familiar with the data before analyzing it.

A qualitative researcher recognizes that the main tool for producing the data is herself, and she had to prepare and be aware of that active role in the process of data collection (see Chapter 5.3.2). Since all participants were contacted directly, she was constantly aware of how her personality, communication, and role as a researcher influenced the relationship and the success of the research project. During the interviews and the team observation, she constantly acknowledged and reflected upon the influence that her presence, words, and behavior exerted.
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As an interviewer, the author asked the participants to open and share sensitive information about their work life. To make sure that she was building a safe and open environment for them, she offered much information about herself, her professional experience and the scope of the research project. Invested in making a good first impression, she offered detailed information about her personal and professional background. During the interviews, she was very appreciative and respectful toward participants and as neutral as possible, trying not to show agreement or disagreement with their opinions and experiences. At one point, a participant offered an unethical account of a team decision, and, although the author could not have been more surprised that this was interpreted as an effective trust practice, she did not comment.

As an observer, the author tried not to express opinions about how the team was developing and how they were building trust, although she was asked about this several times during the kick-off by the team members or the manager. At the beginning of the kick-off workshop, everyone in the team asked her questions about her research project and paid attention to her as she was taking notes. This attention diminished gradually, once the consultant and the manager started engaging everyone in the team activities. Throughout the duration of the workshop, the author only interacted with the participants during coffee breaks, lunch, and dinner, and did not actively participate in the formal team activities (i.e., project management, stakeholder risk analysis, team-building exercises). At the end of the workshop, she was asked during a final feedback discussion about her impressions of the team interactions, and she offered a general statement about the successful development of cross-functional teams. Aware of her role as an observer, it became clear that in that instance, she could not offer personal impressions, but did respond with an impersonal statement: “The role of the observer is restricted to what those who are being observed automatically assign to a researcher” (Merriam, 2009, p. 146). All in all, the author believes that having been in a
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nonparticipator role, her presence did not affect the trust-development process nor the emergence of trust practices.

Although the focus on the observation was on the interactions and the way team members were co-creating meaning as a team, as an observer it was quite difficult in the beginning not to get carried away with their professional jargon and the fact that they were focusing on different aspects of the project. These were important aspects for them, but the task of an observer is not to understand the content—what they were saying—but to observe their interaction—how they were speaking and behaving as a team. This proved challenging, and is always a challenge for the observer, because even trying to be as structured and focused as possible, certain aspects of what is heard de-focuses the observer from how it is being said. The assumptions the author had from the literature and from the interviews influenced the way she observed their actions and their interactions, so recognizing and considering this influence is acknowledged in the data analysis, described in detail next.

5.5 Data analysis

The purpose of collecting the interview and observation data was to tap into the meanings that participants give to trust practices in cross-functional teams and to explore how trust practices are described, produced, and reproduced in team interactions. In this sense, the datasets complement each other by offering “inside information” about team members’ thoughts and opinions (interviews) and “outside information” about verbal and nonverbal behavior (observation). Accordingly, the two datasets were analyzed together, using qualitative content analysis (main categories and subcategories). As a further step, the metaphors of trust building were sorted through metaphor analysis, and the team interactions, where trust is produced and reproduced by signaling, interpreting, negotiating, cooperating, and monitoring through interpretive analysis. Following is a discussion of these methods and the data-analysis process.
5.5.1 Qualitative content analysis

Qualitative content analysis was used for analyzing the data from both the interviews and the observation, because this method fits the aims and objectives of this research project, as well as its epistemological and ontological underpinnings. The method focuses on describing the data, more specifically on the experience and meaning of working in and with cross-functional teams, by developing categories to capture specific trust practices. “Qualitative content analysis is a method for systematically describing the meaning of qualitative material. It is done by classifying material as instances of the categories of a coding frame.” (Schreier, 2012, p. 1).

The goal is to systematically describe the meaning of a selected part of the collected data that addresses the research questions. “On the one hand, selected aspects are less compared to the full comprehensive meaning of a text; on the other hand, qualitative data are rich anyway—so rich that it is impossible for all practical purposes to really capture their full meaning” (Schreier, 2012, p. 2). This means that although all the data is included in the analysis, the material for analysis is selected and divided into units of coding that pertain to the research questions.

As Schreier (2012) points out, a unique feature of qualitative content analysis, compared to other qualitative methods of data analysis, is that it is systematic. Regardless of the type of material analyzed or the research question, qualitative content analysis follows the same sequence of steps: deciding on a research question; selecting the material; building a coding framework; dividing the material into coded units; trying out the coding framework; evaluating the framework; analyzing all the material by using the revised framework; and, finally interpreting and presenting the findings (Schreier, 2012, p. 6).

Additional features of qualitative content analysis are its flexibility and data-reduction (Schreier, 2012). Flexibility refers to how the coding framework matches the data by
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combining both concept- and data-driven categories. Qualitative content analysis offers the possibility to start with concept-driven categories from the interview guide (e.g., clarifying roles, communicating expectations) while remaining flexible to what emerges from the data (e.g., metaphors of trust, nonverbal indicators). Unlike other qualitative methods of data analysis, qualitative content analysis is all about reducing the dataset, about summarizing and focusing on specific information regarding the research questions. The categories are at a higher level of abstraction than the material, which allows for comparison between the three groups of participants (team members, managers, and consultants) and how they describe and use trust-building practices. These characteristics fit the research questions of this thesis; the categories are both highly abstract and concrete.

For this analysis, the qualitative data-analysis package R (RQDA) was used to organize and code the interview transcripts and the observation field notes. Although there are several other computer-assisted qualitative data-analysis programs, such as MAXQDA and NVivo, R was chosen because it is open-access and it has powerful data-analysis and visualization tools.

5.5.2 Metaphor analysis

While qualitative content analysis was used to identify and classify the information from participants, a more in-depth look at the meaning that they ascribe to trust practices in teams was derived from the metaphors that they used. Trust is a highly complex and abstract concept, and the participants used analogies to describe their ideas about trust. The tools of metaphor analysis were applied to these analogies thus illustrating several ideas about the meaning and function of trust practices.

Management scholars have used metaphors to depict complex organizational phenomena for over 30 years. A notable example is Gareth Morgan’s Images of Organization (1986), in which the author proposes that almost all thinking about organizations is based on one or more of the following eight metaphors: organization as machine, as organism, as a brain,
as culture, as political system, as psychic prison, as change, and as an instrument of domination (Morgan, 1986).

Within the context of the organizational-studies literature, metaphors are analogies that allow researchers to understand a concept or phenomenon by mapping one experience in the terminology of another, and obtain a new perspective on a complex topic and situation (Moser, 2000). More specifically, a metaphor consists of the projection of one schema (the source domain of the metaphor) onto another schema (the target domain of the metaphor). What is projected is the “cognitive topology of the source domain”, i.e., the slots in the source domain as well as their relation with each other (Schmitt, 2005).

A distinct category in this study’s content analysis was for capturing the metaphors, which then revealed more detail by using metaphor analysis to further explore them. The main category includes several metaphors (see Chapter 6.1, Metaphors of building and maintaining trust).

5.5.3 Interpretive analysis

In the interpretation of the field notes and observation sheets, the team interactions that reflect how trust practices are produced and reproduced in specific team interactions were carefully selected. This analysis was inspired by the interpretive analysis developed by Willig (2013, 2014).

In the interpretive-analysis technique, “the process of interpretation generates different types of knowledge ranging from apparently straightforward translations to an elaboration of meanings which adds texture to the original account without replacing it with something truer” (Willig, 2014, p. 137). This analysis also builds on Marvasti (2014) for inspiration on analyzing observations. Rather than isolating or inducing an objective finding or phenomenon, the research goal is to uncover the meaning-making processes that team members use to make sense of their interactions. So, instead of analyzing the data for general concepts or patterns,
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the analysis of observational data aims at describing specific processes—i.e., signaling, interpreting, negotiating, cooperating, and monitoring. The interpretive analysis is used to discover how team members and managers construct their social worlds using spoken words (highlighted in the four team interactions presented in Chapter 6.3, Production and reproduction of trust practices).

Qualitative content analysis helped capture in a concept-driven way the processes by which trust practices are produced and reproduced—i.e., signaling, interpreting, negotiating, cooperating, and monitoring (see Chapter 4.3), and they are reconstructed in the course of the interpretive analysis from the observation. Marvasti (2014) notes that good analysis is both rigorous and flexible, guided by a mix of analytic inspiration and empiricism written for and directed at an audience. If the reader cannot understand how the researcher began with a set of observations and arrived at the findings, then the analysis has failed, because it means that the researcher could have written the findings with or without the actual observations from the field.

5.5.4 Phases of the data-analysis process

In the qualitative content analysis, each interview represents one unit of analysis and all relevant parts of each interview that can be meaningfully interpreted with respect to the categories represent the units of coding. The surrounding material needed to understand the meaning of a coding unit qualifies as context units (Schreier, 2012).

Following the systematic feature of qualitative content analysis and with respect to this method, data-analysis process consisted of three phases described in detail: developing a coding frame, evaluating the coding frame, and main analysis.

Developing the coding frame began with going back to the research questions and the literature. As previously stated, scholarly work has revealed several strategies for building and maintaining trust in teams (see Chapter 2.4). Starting with two concept-driven categories
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derived from the literature, labeled trust practices in teams and trust emergence mechanisms, they included the following subcategories: communicating expectations, clarifying roles and responsibilities, openly sharing information, checking for commitment and understanding, creating an open communication environment, and offering timely feedback (Korsgaard et al., 1995); and signaling, interpreting, negotiating, cooperating, and monitoring (see Chapter 4.3). Due to access, the author first collected and transcribed the interviews, randomly selected three interview transcripts, read them twice, and marked the units of coding (i.e., the paragraphs or segments of the transcript that refer to the research questions). From these units of coding, data-driven categories and subcategories were additionally developed (e.g., metaphors of trust practices, nonverbal trust indicators).

Following the requirements for building a high-quality coding frame according to Schreier (2012) the main categories and their respective subcategories must be unidimensional, mutually exclusive, exhaustive, and offering data saturation. Unidimensional means that each category captures a single aspect of the unit of coding and is strongly related to mutual exclusiveness, where a unit of coding can be assigned to only one subcategory within the main category. Exhaustiveness refers to the fact that each unit of coding is captured by a subcategory of the coding frame. Saturation requires that each subcategory is used at least once in the analysis.

Going back and forth between the research questions, the literature, and the units of coding from the interview and observation led to development of a coding frame that included both concept-driven categories (trust practices, mechanisms of trust emergence), and data-driven categories (metaphors of trust practices, nonverbal trust indicators).

The next step consisted of evaluating the trial coding frame. According to Schreier (2012), a coding frame should be evaluated in terms of both validity and reliability. Validity
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refers to whether the coding frame captures what it should. Reliability means consistency, making sure that the researcher has done the coding consistently.

To evaluate validity, the author referred to the miscellaneous category as a good indicator of whether the coding frame captured the meaning and descriptions of trust practices. According to Schreier (2012), the less the miscellaneous category is used, the higher the validity of the coding frame.

For measuring reliability, two independent raters received the coding frame with coding instructions (see Appendix E, Coding instructions). The raters were asked to read and code three full interview transcripts (from a team member, a manager, and a consultant) with highlighted units of coding, to offer them a good understanding of the context. Upon receiving the coded transcripts back, the author and the raters discussed their feedback regarding the categories and the coding process, whether it was clear what was expected of them, and whether the definitions were too abstract or too narrow.

The inter-rater reliability score, Cohen’s Kappa was calculated using R. The mean level of agreement between the two independent raters for all categories was fair to good (Kappa = .51) (Fleiss, 1981). Based on discussions with the coders, the coding frame was refined, and both the main categories and the subcategories were relabeled (see Table 3 below). The same independent raters selected for the first round were asked to code 20% of the units of coding from the field notes and the coding frame, the instructions, and the material coded, were again discussed and improved.
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<table>
<thead>
<tr>
<th>Main categories</th>
<th>Subcategories</th>
<th>Data</th>
<th>Research aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metaphors of trust-building in teams (Data-driven category)</td>
<td>Not a recipe&lt;br&gt;Flow of information&lt;br&gt;Energy of being together&lt;br&gt;Tempo&lt;br&gt;Space for improvisation</td>
<td>Interviews</td>
<td>Explore the meaning of trust</td>
</tr>
<tr>
<td>Organizing team outings (trust-building practice)</td>
<td>Sharing experiences&lt;br&gt;Disclosing personal information&lt;br&gt;Communicating expectations&lt;br&gt;Managing personal and physical distance&lt;br&gt;Organizational resources (team budget)</td>
<td>Interviews</td>
<td>Describe trust practices</td>
</tr>
<tr>
<td>Developing rules of the game (trust-building practice)</td>
<td>Discerning between relevant and irrelevant information&lt;br&gt;Structured communication&lt;br&gt;Sharing sensitive information&lt;br&gt;Displaying positive and negative body language&lt;br&gt;Communication systems</td>
<td>Interviews</td>
<td>Describe trust practices</td>
</tr>
<tr>
<td>Checking-in and checking-out (trust-maintaining practice)</td>
<td>Checking for alignment&lt;br&gt;Controlling tasks&lt;br&gt;Looking for approval from team manager&lt;br&gt;Reporting systems</td>
<td>Interviews</td>
<td>Describe trust practices</td>
</tr>
<tr>
<td>Performing lessons learned (trust-maintaining practice)</td>
<td>Celebrating team success&lt;br&gt;Open feedback&lt;br&gt;Admitting weaknesses or mistakes&lt;br&gt;Managing conflicts&lt;br&gt;Sustaining team silence&lt;br&gt;Management and leadership practices</td>
<td>Interviews</td>
<td>Describe trust practices</td>
</tr>
<tr>
<td>Production and reproduction of trust practices</td>
<td>Signaling&lt;br&gt;Interpreting&lt;br&gt;Negotiating&lt;br&gt;Cooperating&lt;br&gt;Monitoring</td>
<td>Observation</td>
<td>Describe how trust practices emerge</td>
</tr>
</tbody>
</table>

Table 3. Coding frame with main categories and their subcategories

Table 3 shows that the coding framework captures metaphors of trust to which participants refer when describing trust in teams: 4 main trust practices (trust building, organizing team outings and developing rules of the game; and trust-maintaining, checking-in and checking-out, and performing lessons learned), and 23 subcategories of practices (e.g., sharing experiences, disclosing personal information, communicating expectations); and how these practices emerge and are perpetuated—production and reproduction of trust practices with five subcategories (signaling, interpreting, negotiating, cooperating, monitoring).
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Next, the relationships between categories and subcategories were explored and the expected versus actual frequencies were compared across the three groups of participants (team members, managers, and consultants). The author explored the expected versus actual frequencies of the categories and the relationships between the categories and subcategories to learn, for instance, if some categories were more likely to be coded for participants who belong to a certain group.

While qualitative content analysis captured the main categories and subcategories, the metaphor analysis and the interpretive analysis allowed going a step further to select and interpret the metaphors and team interactions. The metaphor analysis builds on qualitative content analysis and is the next step in the analysis of the data. Also, interpretive analysis is a further step in the qualitative content analysis to interpret how team members interact and show how trust is produced and reproduced through the processes of signaling, interpreting, negotiating, cooperating, and monitoring.

This chapter presented the epistemological and ontological choices that informed the research design. It also provided the justification for using a qualitative approach to data collection (semi-structured interviews and nonparticipant observation), as well as background information about the context of the research and the research participants. Ethical considerations were reviewed before providing an overview of the research process itself, including identifying research participants, collecting the data, and the phases of data analysis. The process of developing the coding frame that informed the findings, using qualitative content analysis, metaphor analysis, and interpretive analysis, was described in detail.

The next chapter presents the research findings. The first part, metaphors of building and maintaining trust, explores the meanings that team members, managers, and consultants give to trust practices in cross-functional teams. The second part presents an in-depth description of four trust-building and maintaining practices: organizing team outings,
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developing rules of the game, checking-in and checking-out, and performing lessons learned. The third part, production and reproduction of trust building and maintaining practices, reconstructs by interpretive analysis how trust practices are adopted and re-enacted in four team interactions.
6. Findings

The first section of the findings, on metaphors of building and maintaining trust in cross-functional teams, explores the complex meanings and functions that team members, managers, and consultants give to building and maintaining trust. What meaning do members of cross-functional teams give to building and maintaining trust? How do they conceptualize trust building and maintenance? How do they make sense of trust building and maintenance in their cross-functional teams? Are there any differences between how managers, team members, and consultants conceptualize trust? (see Table 4)

These questions are answered by analyzing the metaphors that research participants presented. The metaphors are part of an emergent, data-driven category presented as part of the qualitative content analysis coding framework (see Table 3, Coding framework).

Metaphor analysis is used to explore the idea that building and maintaining trust are complex practices encompassing both reproducible and contextual elements (recipe metaphor). These trust practices trickle top-down from top management to team members, but are actively interpreted and adapted within cross-functional teams (flow metaphor). Synchronicity and coordination maintain trust, depending on the development of the relationship (tempo metaphor). Building and maintaining trust are practices that constantly transform and must be actively managed (energy metaphor). While structure and rules are important for building and maintaining trust in teams, flexibility is equally important (improvisation metaphor).
### Findings

<table>
<thead>
<tr>
<th>Research question</th>
<th>Research aim</th>
<th>Data analysis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>What meaning do members of cross-functional teams give to building and maintaining trust?</td>
<td>Explore the meaning of building and maintaining trust in cross-functional teams</td>
<td>Qualitative content analysis to identify the metaphors and metaphor analysis to analyze them in-depth</td>
<td>6.1 Metaphors of building and maintaining trust in cross-functional teams</td>
</tr>
<tr>
<td>What do members of cross-functional teams do to build and maintain trust?</td>
<td>Describe what members of cross-functional teams do to build and maintain trust</td>
<td>Qualitative content analysis to identify the practices</td>
<td>6.2 Practices of building and maintaining trust (organizing team outings, developing rules of the game, checking-in and checking-out, performing lessons learned)</td>
</tr>
<tr>
<td>How do members of cross-functional teams produce and reproduce trust building and maintaining practices?</td>
<td>Describe the team processes by which practices of building and maintaining trust emerge and are perpetuated</td>
<td>Qualitative content analysis to identify team processes and interpretive analysis to analyze team interactions in-depth</td>
<td>6.3 Team processes (signaling, interpreting, negotiating, cooperating, and monitoring) by which trust building and maintaining practices are produced and reproduced</td>
</tr>
</tbody>
</table>

Table 4. Overview of the research questions and findings

Building on the meanings and functions that participants give to trust, the next section examines the practices that participants described and the author observed as building and maintaining trust. What do cross-functional teams do to build and maintain trust? What practices do they describe and engage in to build and maintain trust? Which practices are more related to building trust and which more related to maintaining trust? (See Table 4)
Findings

These research questions are answered by identifying through qualitative content analysis four main practices—organizing team outings, developing rules of the game, checking-in and checking-out, and performing lessons learned—that participants described in the interviews and were observed practicing during the team kick-off. These are planned activities performed to build and maintain trust. The four main practices are both data- and concept-driven; some of the identified components of these practices, such as clearly communicating expectations, are discussed in the literature (see Chapter 1.2) while sustaining team silence emerged from the data (the author’s theoretical framework organized these into verbal, nonverbal, and organizational tools from the social-practice-theory approach in Chapter 4.2). These practices are described in terms of actions and interactions, such as sharing sensitive information and monitoring, nonverbal indicators (e.g., physical distance, positive and negative body language), and their embeddedness in the organizational system (e.g., reporting systems) highlighted in the context of how these practices play a key role for building and maintaining trust in cross-functional teams.

The third section describes and analyzes four team interactions that show how trust is produced and reproduced, seeking to answer these questions: How does a cross-functional team produce and reproduce trust-building and maintaining practices? What are the mechanisms or behaviors by which certain trust practices are adopted and re-enacted within the team? How does a specific team in a specific team interaction adopt and re-enact a specific trust practice? (see Table 4).

From the cross-functional team observed, the processes are categorized using qualitative content analysis. Then, four team interactions are selected and interpretive analysis is used to construct how team members as a unit bring forth a project issue (signaling); make sense of the information (interpreting); decide on a common way of action (negotiate); and then perpetuate this by cooperating and monitoring their actions. Trust practices are repetitive
Findings

patterns of meaningful activities that build and maintain trust. The processes analyzed in the team interactions (i.e., signaling, interpreting, negotiating, cooperating, monitoring) are team actions that show how a specific team adopts and re-enacts its own specific trust practices.

6.1 Metaphors of Trust in Cross-functional Teams

The participants used metaphors to illustrate their ideas about trust. An important consideration is that the researcher did not prompt for metaphors. The participants answered the interview question (How do you recognize trust in cross-functional teams?) by accessing a metaphor and making an analogy to another concept or process in order to illustrate their ideas. Once they mentioned this metaphor, they would come back to it as the interview progressed, finding it useful in answering other interview questions or developing other aspects of the same metaphor. This shows the power that metaphorical thinking has in helping people convey abstract ideas by mapping them onto more concrete concepts that are easier to visualize. Sometimes metaphors are embedded in other metaphors. For instance, the trust as flow metaphor is embedded in the military metaphor.

Table 4 below indicates the number of times participants mentioned metaphors during the interviews and during the kick-off workshops (N=32). The prevalence of metaphors in the data is moderate. The metaphors differ in their frequency; for instance, a metaphor such as “we are all in the same boat” was only mentioned once and was insufficiently developed—thus, it could not be analyzed in depth since there was insufficient information pertaining to additional characteristics of the metaphor (for example slots, paths, properties). Included in the analysis are the five metaphors that were most frequently mentioned and developed: recipe, flow, tempo, energy, and improvisation (see Chapter 5.5.2).
Findings

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Number of times mentioned</th>
<th>Team members</th>
<th>Consultants</th>
<th>Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipe</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flow</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tempo</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Energy</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Improvisation</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Destination/path</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Boat</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Army/soldiers</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Balance</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Doctor patient</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>9</td>
<td>9</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 5. Prevalence of trust-building metaphors in the data

Figure 6 below shows the number of times that the five metaphors were mentioned and by whom. The flow and energy metaphors are most frequently mentioned (six times each), while the tempo metaphor is the least frequently mentioned (four times). Managers are more likely to use metaphors to convey their ideas about building and maintaining trust (N=13) than team members and consultants (N=9). The recipe metaphor is more frequently mentioned by team members, while managers mention the flow, energy, and improvisation metaphors. This reveals that team members conceptualize trust in terms of trust building (recipe metaphor), while managers emphasize the aspects of maintaining trust (flow, energy, improvisation metaphors). According to their roles, team members assume that once trust building starts, it remains relatively stable, and they do not need to constantly work on it, while managers conceptualize trust as an ongoing process in which maintaining trust is just as important as building trust.
Next, the aspects of the source domains (recipe, flow, tempo, energy, and improvisation) that are mapped onto trust (target domain) are analyzed, and the conceptual level is revisited to interpret what this reveals about building and maintaining trust, and how this interpretation offers a nuanced understanding of previous theoretical models of trust (see Chapter 2.1).

### 6.1.1 Trust as a recipe

“The *recipe* [to trust] lies in getting the right people in the team and then putting trust into the people. The company needs to be able to share information that in the past, like in Communist times, they would not share: like what the common goal of the company is, you know, just common work.” (IW12, Team manager)

“So, yeah, the other *ingredient* that the project team needs, is very frequent interaction between team members to get enough information so that they can build trust.” (RW13, Team manager)

A recipe is made up of a list of ingredients and the instructions for reaching a particular outcome. Synonyms include prescription, formula, technique, directions, and procedure (cf.
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Oxford Dictionary). The underlying idea is that of a sequence of events, processes, or procedures that, if followed in a particular order, lead to a specific end-product. The process is reproducible—putting the exact ingredients together and following the instructions yields the same result every time, as Figure 7 illustrates.

![Diagram of metaphor source domain recipe]

Figure 7. Schema of the metaphor source domain recipe

“Recipe” is the source domain in the “trust is (not) a recipe” analogy, with a cognitive structure that consists of ingredients, instructions, and the final product. An essential property of the schema in Figure 7 is that the trust-building process is reproducible, linear, and stable, just like a recipe. Knowledge about trust building (target domain) is metaphorically mapped in terms of the recipe schema, which is further differentiated by matching examples of metaphorical expressions such as secret ingredients, standard formulas, and the action of mixing these together.

If trust building is like a recipe, that makes it reproducible; that is, once several antecedents—the key ingredients—are combined, and a linear sequence of rules—instructions as to how team members should interact—is followed, trust will always emerge in cross-functional teams as an end-product. From this point on, there is no further development, which
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means that the process of building trust is stable, does not change anymore, and does not need to be maintained.

“There is no secret recipe to building trust in teams! But one of the key ingredients lies in having the right mix of people and skills and being in a company that has a good communication culture.” (IVIW12, Team manager)

“Because there is no standard formula of how you should… how the team should build trust. But you have to see what kind of a team, how big the team is, what the combination of the team mates is. It could be that in cross-functional teams, because the functional roles are so different, that probably they don’t know each other’s focus or technically what they are doing well.” (IW15ML, Team member)

“So trust-building in the team is something that cannot force, it’s based even on how people are raised. Because each person sees it very differently, there is no recipe to build trust - No! It needs to be very authentic, it just happens…” (IVIW12, Team manager)

But, as participants develop their ideas further, they mention that there is actually “no secret recipe” to building trust, and that the process is nonlinear, contextual, and spontaneous (“it just happens”), rather than a step-by-step, reproducible process. This means that rather than having a single recipe for building trust in cross-functional teams, there might be several recipes, all depending on contextual factors.

Some participants describe the contextual factors that influence trust building in cross-functional teams as following a recipe. The contextual factors mentioned are: team characteristics and composition (“having the right mix of people and skills”, “how big the team is”, “functional roles”); management style (“putting trust into people”); and organizational characteristics (“company that shares information”). For instance, in an organization with “a good, open communication culture,” members of cross-functional teams share and clarify sensitive information with other departments to reduce information ambiguity and build trust.
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Building trust in cross-functional teams encompasses both stable and specific contextual factors and follows both a standard and a nonstandard formula or pattern of development. The “key ingredients” or antecedents that build trust are considered stable, but the mixing or the instructions to follow are “something you cannot force” on the team; it must come naturally, and it depends on contextual factors (team and organizational characteristics).

The metaphor of “trust as (not) a recipe” reveals several aspects discussed in the literature, but also new ones. Rational and affective models of trust (see Chapter 2.1), most notably by Mayer et al. (1995), can be understood as a straightforward recipe for building trust. Based on propensity to trust (“how people are raised”) and perceptions of trustworthiness (ability, benevolence, integrity), team members decide to trust and engage in trusting behavior. But a predefined, reproducible way of building trust lacks because trust develops spontaneously and is contextual, depending on multiple factors such as team composition, management styles, and organizational characteristics. The contextual factors that influence trust building must be taken into account because contextual information provides a richer understanding of the process.

Including contextual factors in rational and affective models of trust better explains how and when team composition, management styles, and organizational characteristics influence trust building in cross-functional teams. For example, team size influences how team members build trust—building trust in a large team is more difficult and takes much more time than in a smaller group (Kozlowski & Bell, 2003). What is more, organizational culture influences when team members build trust. In an organization with an open-communication culture, team members are more likely to start their working relationships with activities and meetings are specifically targeted at building trust.
6.1.2 Trust as flow

“Yes, you can recognize it (trust in teams) *in the flow, in the communication patterns.*

(…) Are they open-minded? Do they add something to the ideas but in a valued way or are they like “No, that’s a bad idea!” or “No, that won’t work!” You will recognize it: there’s a special atmosphere of being together.” (DRIW4, Team manager)

“Trust (in teams) is *transparency in communication or proactive flow of information.*

(…) It’s also about proactively supplying information because we have the empathy and the process understanding of the work at the other end, so that we don’t make a person run after information, we actually understand the information this person will eventually need, and we anticipate this requirement.” (SBIW3, Team consultant)

Flow refers to the action of moving in a steady, continuous stream or supply, as Figure 8 depicts. Synonyms include: movement, current, flux, swirl. In the manner characteristic of a fluid, it means to move or run smoothly with unbroken continuity (cf. Oxford Dictionary).

![Figure 8. Schema of the metaphor source domain flow](image)

As Figure 8 shows, flow constitutes the metaphor source domain in “trust is flow and trust flows within the organization.” The schema flow indicates that the uninterrupted stream
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of “information sharing” and “the open communication patterns” are manifestations of trust building within the organization. The emphasis is on the quality rather than the quantity of information and communication—“transparency in communication” and “proactive information sharing.” The process behind trust that “flows within the organization” is movement, an uninterrupted stream of information within the organization.

If trust is flow, this means that trust is an organizational value or attitude that managers and team members assume at the beginning of their work relationships (“we just take trust as a basis”). Trust makes it possible for project managers to act based on trust and for team members to open up and share information, and a continuous stream of communication and information is supported within the cross-functional team.

Similar to swift trust, trust is assumed in the beginning; it is the basis of cooperation in cross-functional teams, and then it flows—it starts reproducing and changing as team members interact with each other and bring in new meaning. If trust flows, then team members actively engage in building and maintaining trust. Team members in cross-functional teams actively build and maintain trust, giving trust specific meanings and reproducing these meanings within their team and their functional departments. Then, the image of continuous movement and change (“trust flows within the organization”) means that although trust is taken as a basis, imported as an organizational value at the beginning of their work relationships, team members are active agents in producing and reproducing trust.

“It’s like soldiers in the army. The team knows everything gets threatening; we have to take trust as a basis. It’s comparable in companies (…) and it works because trust flows from top management, so as long as there is a link between all sort of layers of the organization, like trust can flow freely through all these layers.” (AFIW7, Team member)

In the paragraph above, the participant points out that as long as there is a link between all the layers of the company, trust can “flow freely.” This link means that management
practices are aligned at all levels of the organization, there is an organizational goal or vision that holds everything together, and these practices permit trust to travel uninterrupted within the organization. In this view, trust as a practice is built top-down and gets perpetuated from management to team members. When managers propose several trust practices, team members accept, enact, and reproduce them.

As one of the participants mentions, the military system is a representative context for this type of “trust flow.” As everything “gets threatening,” soldiers in the army have no choice but to trust the commands of their leaders, who represent the organizational system. Military organizations are considered high-trust organizations whose rules are rarely questioned, and soldiers have no choice but to act based on trust. Organizations become the source or basis upon which team members trust, and placing and honoring trust is part of the work environment. Team members will trust the leader and the team because “that’s just what you do.”

Relating this to the literature, the metaphor of trust as flow is an excellent representation of swift trust in temporary teams (see Chapter 2.2). Trust is the basis or foundation on which relationships between team members start—“you have to take trust as a basis.” The organization and management offer the structure, roles, and routines that enable cooperation between team members, and “trust flows from top management.” Trust is an attitude that trickles from high up in the organizational hierarchy all the way down to all members of the organization when “trust can flow freely through all these layers.”

However, the swift model of trust does not emphasize the idea that team members actively work on maintaining and reproducing trust. While trust is “flow” (of information), it also “flows” (the action of placing and maintaining trust); team members who change and adapt its meaning according to their work relationships enact and perpetuate it. Incorporating this idea in the swift-trust model aids the understanding of the complex relationships between
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agency and structure. Team members engage in a complex process of creating meaning based on organizational structure.

6.1.3 Trust as tempo

“I think I would describe it as a team where there is some kind of *tempo* that brings team members forward, a team where everyone *is on the same frequency*. Like they are connected to each other, they are working *at the same pace*… kind of *in tune*, yes, like *synchronized.*” (KBIW10, Team consultant)

“This is great. It really shows that we are *on the same frequency* and we can *synchronize* with the other requirements of the client, our internal stakeholder and the other departments.” (Day2[12289], Workshop field notes)

Tempo is the speed at which a passage of music is or should be played, the rate or speed of motion or activity, as Figure 9 shows. Synonyms include pace, beat, rhythm and tune (Oxford Dictionary).

Figure 9. Schema of the metaphor source domain tempo

Tempo represents the metaphor source domain in “trust is team tempo”. The schema tempo (Figure 9) indicates that being in tune,” “having a team rhythm,” and “being on the same
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frequency” are characteristics of maintaining trust in cross-functional teams. The emphasis is on the nonverbal synchronicity and coordination of the cross-functional team in a work activity. Synchronization refers to maintaining the same timing throughout the entire work activity while coordination can be understood as the result of working together.

“It’s very important [for trust] to establish that rhythm, cadence of working together and those meetings to fully align on what everyone is working on, what our objectives for the week are, but also, and often, to be looking for an opportunity to pass help or guidance if we’re having any issues.” (DZIW6, Team manager)

If maintaining trust is like maintaining a team tempo, this relates to the process of learning how to synchronize and coordinate with each other. Work relationships within the team start with timing of the work tasks so team members develop synchronicity, a rhythm: “There is a tempo, a way of working together within the team.” This rhythm reflects the process of coordination by which team members maintain or keep trust going, by “working on the same frequency,” “keeping the same pace.”

The tempo metaphor comes from music where through practice and experience musicians in bands or choirs, reach a state of nonverbal synchronicity and coordination with one another (see Chapter 1). They learn to be in tune with the other members, to play at the same beat. Together, members discover and create the rhythm at which the band or choir ticks by learning about each other’s strengths and weaknesses. With time, their relationships transform in such a way that they are able to communicate nonverbally by letting their instruments or voices speak for themselves—“being in tune.” In a similar way, while engaged in the performance of a task, team members in cross-functional teams synchronize or harmonize with one another nonverbally.

Relating this to maintaining trust in cross-functional teams, the metaphor of trust as tempo conveys the idea that coordination and synchronicity are practices that help maintain
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that trust. These practices offer a nuanced understanding of how trust is maintained in transformational models of trust, by emphasizing the coordination and synchronicity that develops as team members learn about each other (see Chapter 2.3, Transformational model of trust).

Participants offered little information as to what happens in case one team member starts going at a faster or slower pace than others, but transformational models of trust indicate that it depends on the stage of their relationship (Lewicki & Bunker, 1995). If team members are at the beginning of their relationship—in the calculative-based stage—their relationship will probably end, because team members failing to synchronize (increase or decrease their speed) at this stage is interpreted as a lack of understanding. The focus is on finding a pace at which cross-functional team members can work together, so synchronizing and coordinating are processes that start off the trust-building process.

If team members have worked together longer and have solved several tasks together, advancing them in the knowledge-based stage of trust development, then the other team members interpret the change to a different pace as an indicator that other factors are at hand, and they will adjust their pace accordingly and recalibrate based on what has changed. But this is only possible because of pre-existing knowledge about the team. At this stage cross-functional team members are no longer interested in finding a pace, but in maintaining the pace that is already set.

6.1.4 Trust as energy

“I think I recognize it [trust] when I see that people are actually... How to say it? They are kind of friendly to each other, so they are positively engaged with each other. They really look at each other, they are interested, and they ask questions to each other, and they are in the moment. There is a positive energy in the team and I think that gives me a
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feeling as a consultant like ‘Ok, this is working really, really well’.” (KBIW10, Team consultant)

“Because I think it [trust in teams] is like, when I come into management teams for example, and I do that a lot, and what I see is that they mostly do not connect to each other and then this energy level is not very high because maybe they are unsecure or... Some kind of fear maybe, of saying the wrong thing or something like that...” (KBIW10, Team consultant)

Energy refers to the strength and vitality required for sustained physical or mental activity. Synonyms include vitality, zest, spirit, passion, and exuberance (cf. Oxford Dictionary). In more general terms, it refers to the ability of a body or of a system to do work or produce change. No activity is possible without energy, and its total amount in the universe is fixed. It cannot be created or destroyed, it can only be changed from one type to another; thus, transformation is the underlying process (see Figure 10).

Figure 10. Schema of the metaphor source domain energy

Energy is the source domain in the analogy “trust is the energy of the team.” Figure 10 depicts the cognitive structure for this metaphor, consisting of the amount of energy (“more
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energy” and “less energy”), the type of energy (“positive energy”), and the transformation of energy (“trust gets burned”). The underlying process is transformation; building and maintaining trust is a process of transformation and must be carefully managed, as trust can transform in different ways (“positive energy or negative energy”).

“Trust provides the team with energy to work towards a goal. If there is a sense of distrust the team will spend a lot of energy to manage distrust or maybe create trust or maybe negotiate trust, and they will not focus on performing, right? So, if there is trust within the team, we can really concentrate on the goals.” (FHIW1, Team member)

“We are burning our working hours for them [the IT members of the team] to build trust, yes. But then from the company’s point of view it’s basically wasting resources, yeah. So, we keep delaying and not really achieving something that we want.” (IW15ML, Team member)

“When team expectations are not met, then of course there’s even more trust burned. This is because the team manager comes mandated with a lot of expectations from the team that has shared with him or her over a long period of time along their workload, a lot of process awareness and then they don’t deliver. So, everyone is disappointed.” (SBIW3, Team consultant).

If trust is energy, trust is a resource that increases by usage, the power that fuels the cross-functional team’s performance (“energy to work towards the goal”). Trusting each other means that there is a “positive energy within the team,” that people connect to each other, are motivated, and “more energy is spent on performing.” When expectations are unfulfilled, then “trust is burned” and “less energy is spent on performing, more energy is spent on managing distrust or building trust.” Trust transforms into something else (a different form of trust) and must be carefully managed.
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In this metaphor, trust and distrust are understood as different concepts, which develop and transform in team interactions and require continuous management. When there are team issues, team members spend their energy creating and negotiating trust and managing distrust. When there are fewer team issues, the energy is spent on performing and their resources are directed toward performing, with less energy spent on managing trust and distrust.

As presented in Chapter 3.4, the relationship between trust and distrust is highly controversial in the literature, with scholars arguing that trust and distrust are either two sides of the same concept (trust) or different concepts all together. The metaphor of trust as energy supports trust and distrust as different concepts that have different antecedents (e.g., fulfilled or unfulfilled expectations).

Also, the trust-as-energy metaphor enables understanding how trust transforms and how it increases with use. This metaphor nicely captures transformational models of trust development (see Chapter 2.3, Transformational models of trust). In teams where the image of the spiraling effect is used, trust leads to more trust, and the energy builds up, like a resource that increases by usage. The more team members act based on trust, the more they build and maintain trust. Distrust functions in a similar way, leading to more distrust, and the more team members act based on distrust, the more they will maintain distrust within the cross-functional team.

Transformational models are incomplete without recognizing that both trust and distrust are needed in cross-functional teams, because their work environment is so complex that they need both in order to function and perform (Lewicki et al., 2006). For example, in a cross-functional team, team members must decide whom to trust with certain tasks, and whom to distrust on other tasks. It is common to positively accept each other’s vulnerabilities and thus reconcile the tension between managing both trust and distrust as part of a healthy, functioning cross-functional team.
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6.1.5 Trust as improvisation

“(trust…) is about the *perceived room for improvisation*. Yes, it's also... you know... how we can stretch the boundaries; maybe we don't need this standard, but in the end, we don't have to actually meet this high standard that is expected of us. So, we can trust that in the end we will deliver something that will be good enough, yes, *we can also adjust our level of expectations* in the process. So, we trust that we will deliver something, we have some sort of end product in mind, I don't know if that will be such an amazing new product as we had last year because maybe the new people will not be as inspired, they will not be so engaged… whatever, maybe it's a bad time of the year, there a lot of factors... But we trust that we will come up with something that is creative.” (FHIW1, Team member)

An act of improvisation refers to composing, executing, or arranging anything in a spontaneous way, often without any previous preparation (cf. Oxford Dictionary). Improvisation is essentially a process that happens in an unusual way, in a different way than it normally would. The main component of improvisation is spontaneity. Synonyms include extemporization, spontaneity, and ad-libbing. Improvisation can have a more or less effective outcome, and it usually occurs when something does not go according to plan—for instance, different internal and external factors lead to a situation where a cross-functional team must adapt very fast and come up with a solution in the face of change (see Figure 11).
Improvisation constitutes the metaphor source domain in “trust is improvisation,” as Figure 11 shows. The schema improvisation indicates that once several norms are in place, trust allows team members space “to stretch the boundaries,” “to adjust expectations,” even “to find the right balance between different expectations.”

“(trust is about…) We respect what you do and we want you to respect what we do, so how to find the right balance between different expectations and how to improvise. Taking risks together is not easy.” (AKIW2, Team consultant)

Referring to the current project on which the team is working, one team member mentions that several factors are impeding this cross-functional team from reaching a previously set standard. But they improvise in order to create a product in an ad-hoc fashion and extend the boundaries or standards that have been previously set for them by management and client. Another aspect mentioned by the team member concerns individual and team processes of adjusting the level of expectations in the process. The team has a clear direction on where it is heading, even with several uncertain factors, and they will need to improvise and develop new practices and routines along the way. Thus, trust in this project team is about coming up together with a spontaneous way of coordinating and adapting to the new situation—improvising.
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The metaphor of a theater play comes to mind, where actors have their specific function and role to play, coordinated by a director. As in a cross-functional team, the actors are interdependent in their tasks and, in order to achieve the goal of performing the play, they must coordinate and rely on each other. Improvisation during a theater play means that when things do not go according to the rehearsals, the team will spontaneously and creatively come up with new practices. While there is a script, there is also flexibility. Improvisation does not happen without knowledge and skills. Without the input of each individual in the team, there can be no improvisation: you cannot improvise on nothing, you have to improvise on something.

The main idea of this metaphor is that it is equally important for cross-functional teams to set up a certain structure (e.g., roles, rules, and routines), as well as to leave space for improvisation. Participants say that building trust requires rules for reliability, and that these rules allow for flexibility and improvisation. So, their talk about trust is quite complex and might even sound like a paradox at first, because they say that once the team has set up a certain structure or control (i.e., once team members have built trust), then they can leave room for improvisation (i.e., using or maintaining trust that is already there). In other words, the participants emphasize that cross-functional teams need certain rules in order to have certain parts where they can be flexible.

Relating this to the literature, the metaphor of trust as improvisation offers a more nuanced understanding of the process of building trust that is set between rational and affective models of trust and swift trust (see Chapters 2.1 and 2.2). While rational and affective models of trust discuss how people select or build good reasons to trust and develop emotional bonds within a team, swift trust considers institutions as sources of trust, with their taken-for-granted roles and structures. The image of trust as improvisation expresses the complex relationship that exists in the process of building trust, in which team members not only require a certain level of knowledge about the others (e.g., competence, emotional bonds), but also an
organizational structure to support the development of these relationships within cross-functional teams. Without structure, there would be no basis upon which to improvise or do trust.

6.1.6 Similarities and differences between metaphors

The five metaphors analyzed above relate to the literature on building and maintaining trust in different ways. The recipe metaphor explores the image of a step-by-step, reproducible process of building trust while also considering the nonlinear aspects and contextual factors (e.g., team composition, organizational characteristics). The flow metaphor highlights trust building as a link between all organizational levels, not just simply imported from top management but also shaped and adjusted by team members. The tempo metaphor explores nonverbal synchronicity and coordination as processes that maintain trust, depending on the relationship-development stage. The energy metaphor highlights the function of trust building to transform team performance and the requirement to manage both trust and distrust in order to have a healthy, functioning team. The improvisation metaphor explores the basis for building and maintaining trust in cross-functional teams by conveying the idea that while structures and rules offer predictability, it is equally important to have flexibility within the team.

All metaphors similarly convey the idea that building and maintaining trust are practices that unfold over time and that influence each other, because by trusting, team members confirm the trust that has been placed in them and also help to keep it going. The relationship between practices of building and maintaining trust is complex, and it can be challenging to distinguish between the two, because sometimes the same practice can have both trust-building and trust-maintaining purposes. The distinction between building and maintaining trust may not seem so clear, but there are trust-building practices that support trust-building (for instance reporting or setting up an agenda) and are not evidence that trust is already there.
Overall, these metaphors reveal the tensions or paradoxes of building and maintaining trust in cross-functional teams. The recipe metaphor captures the idea that while a part of the trust-building process unfolds in a reproducible, stable manner with respect to the antecedents that lead to trust-building, several other aspects make trust-building nonreproducible and contextual, such as the influence of individual, team, and organizational characteristics. The metaphor of flow reconciles the taken-for-granted nature of trust as organizational value with the active building and maintaining of trust in which team members engage, the constitution and reproduction of trust. That is, while trust is taken as a basis for starting their work relationship, managers and team members actively work on reproducing and maintaining trust. The energy metaphor highlights how trust as a resource transforms and increases by usage, and how a healthy, functioning team requires both trust and monitoring. The idea of trust as improvisation offers a different image than the idea of trust as flow or as routine, because it shows that cross-functional teams need both structure and flexibility.

These metaphors matter because they offer complex images of trust building and maintaining practices in cross-functional teams. The metaphors go beyond what the literature shows, namely, that trust development encompasses both reproducible elements and contextual factors, and that changes in synchronicity and coordination of team members either diminish or maintain trust, depending on the stage of the relationship. Cross-functional teams require both trust and distrust to function. While trust as an attitude is imported from top management or assumed at the beginning of their relationship, team members actively work on adjusting and maintaining trust, “customizing trust” to fit their team culture. Both rules and flexibility are required to build and maintain trust.

6.2 Practices of Building and Maintaining Trust in Cross-functional Teams

This chapter aims to answer the second research question: What do cross-functional teams do to build and maintain trust? Doing so involves presenting and discussing the practices
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in which team members, managers, and consultants engage, and analyzing which team practices are more related to building trust and which are more related to maintaining trust in cross-functional teams. What participants told the author and what she observed in her role as researcher during the team workshop leads to interpreting how actions and interactions between team members, managers, and consultants—nonverbal indicators as well as organizational tools (e.g., team exercises, reporting systems)—enable the development and maintenance of trust in cross-functional teams (see Table 4).

Following are four practices of building and maintaining trust that are described and enacted within cross-functional teams. Practices are collective and meaningful activities that team members, managers, and consultants engage in, the nonverbal cues that support these activities, and the organizational tools that they use (as discussed in Chapter 4.2). The interview and the observational data are analyzed together and four practices of building and maintaining trust in cross-functional teams emerge: organizing team outings, developing rules of the game, checking-in and checking-out, and performing lessons learned.

As discussed in Chapter 4.3, trust practices are common patterns shared by all team members, comprising actions and interactions, nonverbal indicators, and organizational tools. Practices are created, shared, and reproduced by all team members who engage in these practices, supported by organizational resources and structures. The main categories and their subcategories, identified with qualitative content analysis, are both concept-driven (derived from the literature) and data-driven (emerging from the data collected in interviews and observations). The categories of verbal actions and interactions are concept-driven and have been discussed in the literature (i.e., admitting weaknesses and mistakes, sharing sensitive information) (see Chapter 2.4). The nonverbal indicators and organizational tools are data-driven and have emerged from both the interviews and the observational data (e.g., body language, looking at team manager for approval, managing physical distance). Nonverbal
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indicators and organizational tools are part of trust-building and maintaining practices (see Table 4).

6.2.1 Frequency analysis

The author did a frequency analysis of the categories to have an overview of the patterns within the data. Frequency means the incidence of a category in total and per team role, representing the number of times a category was mentioned by a participant in an interview or described in the observation (Mayring, 2000).

A chi-square test of independence was performed to determine whether the observed frequencies of trust practices across the team roles (team members, managers, consultants) are significantly different from the expected frequencies. The relationship is statistically significant $\chi^2 (26, N = 261) = 44.31, p < .05$. Comparing this result to the critical Chi-square value shows that the Chi-square value obtained is too large to have been by chance. This means that there is a significant difference between the observed and expected frequencies of trust practices for these team roles. In other words, the frequencies of these trust practices differ significantly among the three team roles. Thus, team members, consultants, and managers describe and use these practices very differently.

Investigating the pattern of the observational data was impossible because there was not enough information to analyze the distribution of practices by team roles. Instead, the frequencies with which the team practices were observed in the workshop were reviewed to see whether they differed according to the day of the workshop.

Again the author performed a Chi-square to see whether the observed frequencies of trust practices on the first and second day of the kick-off workshop are significantly different from the expected frequencies. The relationship was statistically significant $\chi^2 (13, N = 153) = 20.76, p < .05$, indicating a significant difference between the observed and the expected
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frequencies of trust practices for the two days of the kick-off. Therefore, these trust practices are described and used differently on the first and second day of the workshop.

While this information helped explain how the data looks, a further step was to organize these practices within a framework that offers an understanding of the actions and the interactions between team members, the functions of these practices, and the organizational tools and resources that support them.

After going back and forth between the literature and the empirical data, the author incorporated the concept of practice to organize the findings (Section 4.3), capturing four main practices of trust building and maintenance that describe how team members interact, their functions, and the organizational tools that support these interactions. Table 6 presents an overview of the main practices and categories that are part of the coding frame, highlighting their building and maintaining functions (Section 5.5).

<table>
<thead>
<tr>
<th>Practices in cross-functional teams</th>
<th>Function</th>
<th>Trust mechanisms</th>
<th>Actions and interactions</th>
<th>Nonverbal indicators</th>
<th>Organizational tools and resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizing team outings</td>
<td>Building trust</td>
<td>Increasing similarity between team members</td>
<td>Sharing experiences Disclosing personal information Communicating expectations</td>
<td>Managing personal and physical space (physical proximity, physical distance)</td>
<td>Organizational resources (team budget)</td>
</tr>
<tr>
<td>Developing rules of the game</td>
<td>Building &amp; maintaining trust</td>
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Table 6. Overview of trust-building and trust-maintaining practices and main categories

Organizing informal team events builds trust because members of cross-functional teams experience a different context where they can interact and get to know each other. The practice of developing rules of the game serves the purpose of both building and maintaining trust; team members develop rules and structures to handle complexity and, by enacting these rules, keep trust going. Checking-in and checking-out relates more to maintaining trust, because it means the team is interacting on the assumption of a commonly shared understanding, i.e., interacting based on trust, and therefore reproducing trust. Performing lessons learned usually emerge upon task-completion or toward the end of a project phase. The practice refers to maintaining trust because it means reflecting on the team’s progress, offering feedback, and making sense of team events such as conflicts, team decisions, and misunderstandings.

A general point is the subtle distinction between building and maintaining trust (Möllering, 2006), and illustrating it with the data sometimes becomes challenging. Actions that refer more to building trust—for example, developing a common understanding—also maintain trust because team members and project managers act and interact based on the assumption that there is a common understanding. By acting based on trust, they perpetuate the trust that is already there. Next, the four main practices and the verbal actions, nonverbal indicators, and organizational tools that support them are analyzed in detail.
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6.2.2 Increasing similarity between team members—Organizing team outings

This practice captures actions and interactions between members of cross-functional teams that help them build trust by increasing the perception of similarity and overcoming the challenges of functional, and sometimes cultural, diversity. This occurs through verbal actions between team members (e.g., sharing experiences, disclosing personal information, communicating expectations), nonverbal indicators (e.g., physical proximity, physical distance), and accessing organizational resources (e.g., team budget).

As presented in Chapter 2.1, disclosing personal information and communicating expectations are established practices of building trust. The participants in this study discuss these practices as more likely to occur in an informal setting, such as over lunch or dinner, or by sharing personal space. The participants also mention that the organization supports these practices, and the team has access to a budget for informal team activities.

“So in the US, but I often see this here as well [in Singapore] often times it’s ‘team outings’ like drinks after work, a team lunch or team dinners. That's always a very popular tool, if you will, to use to try to introduce the people, get them to kind of open up, get them to have a little bit more informal sharing. And so I am involved in those quite a bit, and I think it works for most people in professional settings yeah... Because some sort of alcohol is sort of ingrained in the culture but not so much in some of the Muslim countries where it's not permitted because of your faith... But still like going for lunch, going for dinner, those types of settings have always been very effective. See I... whenever we started a new project, we always made sure we had a lunch, a team lunch at the very minimum, and of course drinks after work as well just so that we moved from the office setting and hopefully be a little more comfortable about sharing and talking about ourselves.” (DZIW6, Team manager)
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In the excerpt above, one of the team managers interviewed describes how the practice of going out for drinks or lunch with the team is a great way to introduce all team members and get the trust-building process started. By changing the setting and moving from the office space to an informal place, team members and managers are more willing to talk about their personal and professional lives. Disclosing information about personal and professional aspects is part of transformational models of trust (see Chapter 2.3) and considered a practice of building trust in cross-functional teams. Team members are more willing to share personal information and to communicate expectations, as in the example below, when they are in informal settings.

“We went out for a common dinner and there was no alcohol... Because, of course, the guys from Tunisia do not drink... Yeah... But they also didn't want the Germans to drink... So it was not possible to get some alcohol... Yes... Everybody had water or Coke... yes, that was all. So it was, if you like, it was forbidden. It was forbidden for the Germans to drink a beer or some wine... And they wanted to discuss it in the morning... yeah... if this is a rule... And if they accept not to drink alcohol in Tunisia what would be the case if the meeting took place in Germany? And if they went out in Germany for dinner would it then be the expectation of the guys from Tunisia that the Germans would not drink alcohol? Or would it then be allowed to drink beer in the evening? So we discussed this. It was quite difficult, of course, because... The guys from Tunisia were quite strict: ‘for us it’s forbidden so we expect you to respect that, so please do not drink alcohol when we are together’ and some of the German guys were not really happy with that. So it was not really a conflictual discussion, but a difficult discussion... but then, at the end, we had a kind of agreement and then the Germans said: ‘Ok, we accept. We now understand how important it is for you, so even if the next meeting is in Germany we will drink water with you and no beer on the table.
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If that hurts you, we accept that, and then that will be our rule’.” (AKIW2, Team consultant)

This example captures how the practice of communicating and negotiating expectations develops common understanding and supports trust development. By going out for dinner, this cross-functional team came to recognize the different expectations of the team members and to develop a way to communicate and negotiate what their expectations as a team, as a whole, are going to be. The fact that everyone in this cross-functional team had a different cultural background and different expectations was clear, but in this informal setting they had to negotiate and develop a new way of interacting. Communicating and managing expectations in the literature have already been discussed as trust-building mechanisms (see Chapter 2.1), but the team practice of a team outing together with other nonverbal interactions facilitates the process of building trust.

Managing personal space and distance emerged as a nonverbal practice that depicts how team members and team managers use physical surroundings to position themselves and to manage their relationships. Physical distance or proximity refers to how team members sit or position themselves during team outings.

“For example the first coffee break … Yes? We worked 2 hours - 2 1/2 hours and we had the first coffee break which normally is outside the room, in this case we were in a hotel… Yeah… So outside the room there was a coffee corner… They were standing there in smaller groups and what I saw: they were standing together in groups of people who already knew each other… The second coffee break in the afternoon I started to see groups, mixed groups… Standing outside and discussing… And the second day completely mixed… They were all able and they were all willing to talk to all the other colleagues… They were more in contact with each other not only with the colleagues they already knew but also with new colleagues.” (AKIW2, Team consultant)
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In this example, the team consultant describes how the coffee break offers the informal setting where team members and managers of cross-functional teams get in contact with each other. This means exchanging more personal information and talking about their roles and responsibilities, and engaging with each other in terms of physical proximity. This proximity is an indicator that the process of trust building is in place. On the other hand, maintaining physical distance is an indicator that the trust-building process has not started.

“In the first coffee break, some of the team members go outside in the lobby to get coffee and snacks, while others remain in the conference room and others rush outside to smoke, not participating in the informal coffee break. The team members are in the lobby and they sit around the coffee table, at a certain distance from each other.” (Day1_Field notes [18448:18604])

The field note above is an excerpt from the author’s observation of the first coffee break that the team had in the morning. Knowing that team members are at the beginning of their interaction and do not know each other yet, the physical distance they maintain from one another is interpreted as an indicator that the trust-building process has not started yet. This changed throughout the day as they got to know each other, and during the next coffee break, they positioned themselves closer to each other, maintaining physical proximity that indicates trust building had begun.

Team outings take place when there are organizational resources allocated, such as a team or a project budget. The organizational resources to which cross-functional teams have access enable them to develop good working relationships and thus support the trust-building process.

“(…) So they know that people who work there have a strong voice and they made sure that there was always a budget for the staff members for parties: two times a year a summer party and a Christmas party, and everybody was invited and they made great
parties with great ideas like you know… And every team besides the big parties had a
budget to make evenings for themselves to have team parties, go for team dinners, and
this was a binding instrument.” (IW4DR, Team manager)

In the paragraph above, the team manager describes how the organization offers
resources and incentives in the form of parties and team budgets, with the purpose of binding
team members. The organization fosters a trust-building culture because it offers the financial
resources each cross-functional team needs to engage in team outings.

From what participants described and what was observed, organizing informal team
outings, especially at the beginning of the project starts off the trust-building process. In a way,
this practice both builds trust within cross-functional teams and, to a certain degree, becomes
an indicator that the trust-building process has started, especially because of the nonverbal
indicator of maintaining physical distance or proximity.

6.2.3 Managing information complexity—Developing rules of the game

Team members describe the practice of developing rules of the game as a way to cope
with information complexity. Cross-functional teams deal with data overload and with
ambiguous, incomplete, and sensitive information (see Chapter 1.2). This practice consists of
actions and interactions related to how team members deal with information (e.g., developing
structured communication, differentiating between relevant and irrelevant information, sharing
sensitive information from previous projects), as well as nonverbal indicators (body language)
and the organizational tools that support information management (communication systems).

By developing what members of cross-functional teams call rules of the game, a team
both builds and maintains trust. Trust is built because team members develop rules and
structures to handle complexity, and trust gets perpetuated and maintained because by enacting
these rules, team members keep trust going.
“For example, too many emails, too much e-mail ping-pong... Always the managers in copy, yeah? So we need a different way of dealing with information. And then they come up with a couple of ideas like instead of sending an e-mail we talk to each other, we call each other, we… I don't know… More direct communication instead of using the mails. That is very often a part, for example, of the rules of the game. And then we see: Did that rule decrease yeah the number of emails you send to each other? Did it help to better deal with all these escalation processes which we normally have when we use emails?” (AKIW2, Team consultant)

The team consultant interviewed describes here how team members facing information overload develop a rule for communication, concerning which information should be shared by email and which face-to-face or by phone. The idea is to establish which information is relevant for everyone and which concerns only some functions. If information is ambiguous, incomplete, or sensitive, or if it requires an immediate response, then calling or chatting face-to-face is better than writing an email, because it allows team members to make sense of the situation and construct meaning. All these ways of handling information must be discussed and negotiated, and a rule or a structure is then set in place.

We already know from previous studies that frequent interaction and sharing of information builds trust in teams (see Chapter 2.1). But what becomes relevant for building and maintaining trust in cross-functional teams is which type of information to share (i.e., discerning between relevant and irrelevant information, between sensitive information that cannot be shared outside the team and information that can be shared with other departments and stakeholders), and using which channel (i.e., email, chat, face-to-face, phone). Every team member and project manager bases actions on this assumption, but it requires frequent interaction to find a structure to avoid information overload, to discern between relevant and irrelevant information, and to know which information cannot be shared outside of the team.
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“If we send the message to one person in the team, then we don’t put everybody on copy. On the other hand, if we know that in the midterm somebody else is going to benefit from that information, we put that person on the copy, but in the subject line we characterize exactly what we expect as a result of this email.” (SBIW4, Team consultant)

In the paragraph above, a team consultant describes the practice of discerning between relevant and irrelevant information. This cross-functional team has a rule for how to communicate, so that team members receive the relevant information that concerns them and their tasks. This is an important aspect of the process of maintaining trust; once this practice is set in place, team members act on behalf of the others, based on trust, on the assumption that they know which information the other team members need and which they do not.

A category of actions that are part of this practice and observed during the team workshop is sharing sensitive information. Confidential and sensitive information about previous projects, clients and stakeholders offers the cross-functional team important background and context. It becomes a rule of communication to provide this information and to make sure it is not shared outside of the team.

“M., the Sales Manager smiles and says ‘That’s why we’re here: to find a way. A strategy that I obtained from one of our competitors, is that they have two catalogues: one internal and one external, that they share with the client. That could be a possible way. The Project Manager shakes his head and adds ‘Yes, we need to make them believe that is reality, when in fact it’s not.” Day1_Field notes [33834:34109])

For example, in the quote above, the sales manager of the observed cross-functional team proposes that the team adopt a strategy that their competitor has, a strategy of making profit by presenting the client with a different catalogue that has higher prices. First, sharing this confidential information about their competitor is an established practice within the team,
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since the project manager has already acted upon this before, at the beginning of the workshop. Second, adopting this strategy means deceiving the client into thinking that these are the real prices, when in fact they are not. This is interpreted as a trust-building practice because there is an underlying assumption that this information will not be shared outside of the team.

“Just one example when you make mistakes that they trust you can make up for the mistakes, that they trust that you don’t betray the team, that the team maybe also has something they need to preserve that should not be brought outside because maybe other competing teams would benefit from it.” (FHIW1, Team member)

In the excerpt above, a team member mentioned the action of not betraying the team by sharing confidential information that, if distributed outside, would become a competitive advantage for other teams. This is an essential action for maintaining trust, because it means acting according to their mutual interest as a team and the rules of communication that have been developed.

“For example which communication tool for which purpose? If we want to get an immediate feedback we don’t use email, we call. (…) Or for example, if we don’t understand a communication in an e-mail we immediately write that, and we don’t write ‘If I understood what you said correctly, did you say …’ but we ask ‘If I understood what you meant, did you mean… this and that’…” (SBIW4, Team consultant)

In another example, a team consultant describes how their cross-functional team maintains trust by acting on rules of communication. These can include a shared understanding about how to manage information by different channels, how to write emails, certain abbreviations, and even a professional jargon that only they can decode. During the team workshop, team members used abbreviations for client requirements, departments, and functions. This is an indicator of trust maintenance, because they acted based on the assumption
that everyone understands this professional jargon, therefore keeping the rules going and maintaining trust.

Displaying body language refers to both positive and negative nonverbal signals between team members of cross-functional teams, such as smiling, nodding, actively listening, leaning back, and crossing their arms. This maintains trust either by strengthening the message communicated verbally, or by signaling disapproval or skepticism about the content and the way information was shared. For example, several managers and team members talked about how smiling, nodding, and active listening signals are indicators that the cross-functional team has developed trust.

“Well if they all get to Orchard Road smiling, then there is trust in the team.” (MNIW9)

During the team workshop, the author observed how team members paid attention and listened to what the others were saying usually by taking notes, nodding, and making frequent eye-contact. These nonverbal behaviors are indicators that relevant and structured information is shared within the cross-functional team, and therefore that trust is maintained within the team.

“But if the Project Manager Assistant is presenting again the Risk Management Basics. Everyone is paying attention: taking notes, following his ideas and his thoughts by nodding their heads.” (Day2_Field notes [862:1005])

In the observation note above, the project manager assistant delivers a presentation, and everyone pays attention, takes notes, and their nonverbal behavior shows that the information shared is congruent with the expectations of the team. But in another example, team members leaning back and crossing their arms are actions that signal trust building and maintenance.

“Yes, so body language is huge: eye-contact, even how people sit at a meeting or sit at one end, people that either lean back or cross their arms: that implies that they are either
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very skeptical of what they are saying or what they are trying to do.” (DZIW6, Team manager)

In the excerpt above, the manager talks about the importance of negative body language for understanding the information-sharing practice within the team. When team members lean back or cross their arms, it means that irrelevant and unstructured information is shared. These positive and negative nonverbal signals are important for building and maintaining trust, because they indicate the congruence or lack thereof between team members’ expectations and the information that is shared within the cross-functional team, and acting in accordance with these expectations and rules keeps trust going.

Organizational tools such as communication systems (e.g., phone, email, and instant messaging) support this practice by providing the platforms that team members need to communicate. Additional understanding regarding which tools are to be used and for what purposes is developed within the team and the organization. Communication tools support the process of building and maintaining trust, because they offer the platform for both managing information complexity and checking the accuracy of certain types of information by maintaining a data log of what has been shared and with whom.

The practice of developing rules of the game helps cross-functional teams deal with information complexity by building and maintaining trust. We know from previous studies that frequent interaction and information sharing builds and maintains trust (see Chapter 3.3), but for cross-functional teams, it is vital to establish rules and routines about what type of information to share (e.g., relevant and irrelevant information, sensitive information that cannot be shared outside the team, and information that can be shared with other departments and with stakeholders), how this information is shared nonverbally (i.e., positive and negative nonverbal signals) and by which communication channel (e.g., email, chat, face-to-face, phone).
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6.2.4 Managing multiple reporting—Checking-in and checking-out

The practice participants referred to as checking-in and checking-out captures actions and interactions between members of cross-functional teams that maintain trust, to overcome the challenges of multiple reporting (see Section 1.2). This means discussing and checking whether everyone is aligned on what they have to do next. This practice is described and enacted in actions and interactions between team members (checking for alignment, monitoring), nonverbal indicators (approval from team manager), and organizational resources (stakeholder analysis, reporting systems).

“And I think that is something we needed to work with continually, talking about trust, about building trust in this group. And I was trying to do it like with my check-in and check-out sessions and so on just to... And also, I was also trying to always ask questions like ‘How does this feel for your role? And how does it feel for your role? And how could you help each other in this until we meet again?’ I mean I was trying to encourage connections and also to align the perspectives of the other team members. (…) And I mean, that is what I was doing when I did the check-ins and check-outs, that I’d try to ask how the situation is in your department and what are you thinking about right now and what is... But still I think I could put more effort into maybe this... Yeah, the problem is that we had too little time for it, you know.” (IW10KB, Team consultant)

“At the end of the discussion I always like to end with checking-out, like are we aligned on what we are trying to do, are we aligned on what I need from you, and are we aligned on when we need to do to have this done. Those 3 key things are... seem quite simple, kind of like that’s obvious, but you’d be amazed how many times people walk out of a meeting even at C-level and they forget to do a check-out and send a check on that, where they don’t align on that, and that just causes problems as well as catastrophes. So something just as simple as, at the end of the conversation just having that alignment
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and even writing it up on a white board so that it’s plain and visible and there’s no ambiguity.” (IW6DZ, Team manager)

In the two excerpts above both the team consultant and the team manager describe the importance of investigating how team members are progressing with their work (check-in) and what still needs to be achieved (check-out). Cross-functional teams have complex tasks and reporting relationships, and it is challenging to manage these relationships. Therefore, discussing the challenges of stakeholder management, as well as checking for alignment and common understanding of requirements, are important actions that are part of the practice of checking-in and checking-out. Checking for alignment, monitoring, and acting based on common understanding of requirements are actions that have already been discussed in the literature as maintaining trust (see Chapter 3.3). Admitting weaknesses and mistakes about the project development refers to doing and saying in which team members and managers show the challenges they face, their potential lack of knowledge, or mistakes that they have made. This checking-in and checking-out practice is an indicator of maintaining trust. On the one hand, being comfortable enough to share as a team all these challenges and weaknesses signals that trust is there; on the other hand, perpetuating this practice means maintaining and reproducing it.

Checking for common understanding of requirements refers to asking questions about the understanding of the project requirements, clarifying roles and responsibilities, and monitoring each other on what each must do and how they must do it. This category refers to activities of continuously checking that the team completes the agreed-upon tasks.

“(…) the team was developing during the year and we were under pressure with the hiring. So we hired of course twice like wrong people for the team. The other team members believed in the project and we made sure the new ones completed their tasks.
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One person was always sending reminders and another one was checking their emails before they would send them to the client.” (IVIW12, Team Manager)

“But in general terms we want to resolve these differences: clear channels of communication, everyone aligned to the same goals, and a sufficient but not excessive amount of control in place.” (RWIW13, Team Manager)

In the paragraphs above, the project manager talks about a situation when new team members were continuously monitored on several tasks, and how this was expected in order to complete the tasks. Another team manager describes the necessity of ensuring that the team has a shared understanding of the rules of the game (how to communicate and what their objectives are), and monitoring just enough but not too much. Previous research indicates that monitoring can be interpreted as either a lack of trust or as building trust, depending on the phase of the project or the type of task (see Chapter 3.4). Here, monitoring builds but also maintains trust, because the members of cross-functional teams act based on the assumption that control is part of their tasks, and they decide which tasks require control and when.

In terms of nonverbal indicators, during the team workshop, team members were observed paying constant attention to the reactions of the team manager when they discussed the stakeholder analysis, signaled their intentions, and negotiated who would do what.

“Team members are discussing and negotiating who is more important as a stakeholder. Not much agreement still, there is the feeling that all are important somehow. They are looking for the Project Manager’s reaction. They are always looking at him when they discuss something to see whether he agrees or disapproves to what they are saying.”

(Day1_Field notes [31160:31439])

The field note above details how team members used to constantly look at the project manager for approval or disapproval when they were discussing. This interaction shows how the team reacted when the project manager informed them about the project’s profitability. All
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team members looked at each other and at the project manager and started discussing, because they did not expect to hear that this project is not profitable for the company. During the kick-off workshop, several interactions such as this one occurred, when team members paid attention to whether the team manager approved or disapproved of what they were saying. This indicator of maintaining trust through control reflects a need to check for congruence between the nonverbal reactions of the team members in reaction to the team manager.

An organizational reporting system supports the practice of checking-in and checking-out. In this sense, monitoring becomes part of the team’s task to complete a high-quality project on time and within budget.

“The Project Manager mentions how important the work breakdowns structure is and why they need to use the Reporting Project tool, the Project Managers says ‘Control cannot be delegated. We are all responsible.’ The Assistant to the Project Manager adds ‘Yes, the task is so complex that we need to plan, structure, and report. We need to breakdown the specific content that is in the software: project management activities, what we did so far in terms of risk management, stakeholder management and risk analysis, what you do, your deliveries are the content, the daily business. Our responsibility is to manage the deliverables, to check that complex tasks are completed on time, and to keep track of the project flow.’” (Day2_Field notes [31160:31439])

During the team workshop, both the project manager and the assistant project manager highlighted the importance of the organizational reporting tool that they use to keep track of the project structure. It became clear that without this tool, the process of monitoring becomes an almost impossible task, since the project is highly complex.

The literature includes much on trust and control, but the practice of checking-in and checking-out goes beyond that, because it emphasizes their complementary relationship. While recent research has noted the importance of team members’ interpretation in determining how
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control builds trust, the practice analyzed in this study shows that control also maintains trust when it is interpreted as part of the project tasks and when members of cross-functional teams collectively decide which tasks are monitored, and when. In addition, monitoring is embedded in the organizational structure, as the reporting tool demonstrates. Because of project complexity and duration, monitoring is not only expected but also required, thus building and maintaining trust.

6.2.5 Team reflexivity—Performing lessons learned

The practice referred to by participants as lessons learned or group time-out captures actions and interactions between members of cross-functional teams with the purpose of reflecting upon and maintaining trust. This means discussing the challenges that team members face, why some tasks have been carried out in a certain way, and developing strategies to improve teamwork. This practice is described and enacted in actions and interactions between team members (e.g., celebrating the team’s success, open feedback, admitting weaknesses, managing conflict), nonverbal indicators (e.g., team silence), and organizational resources (e.g., management and leadership practices). Practicing team reflection and allowing for group time-out refers to maintaining trust, because it means acting on the basis of trust by reflecting on what has been achieved, what went well, and what did not.

“We put more focus on the process as such and talk with the team about it and just have some meta-reflection about it, like ‘Ok, we worked on these tasks. How did it work? And how can we just... What has been good and what do we need to strengthen or... yeah?’ That is a good time-out for the group, to think about what we have achieved, what mistakes we did and why.” (KBIW10, Team consultant)

Part of discussing how the team interacts is celebrating the team’s success, also a practice of maintaining trust both between manager and team members and between members.

“When we reach a milestone or achieve a target we just celebrate that in the project
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team. So we say within the project team ‘Ok, we have really succeeded in implementing a system that is so easy that the people can... like to use it and feel like they can also influence it still.’ We can participate in developing it.” (KBIW10, Team consultant)

In this example, the team consultant describes how the team celebrates success by recognizing its achievement during a team meeting. There are also other ways that were mentioned, such as sending an email with the project owners copied, thanking every team member for his or her effort, or as another manager said, “something as small as bringing cookies” (IVIW12, Team manager) can function as a trust-maintaining practice.

“We say what we think and then we do what we said yeah? Trust is more visible in how team members give each other feedback. Are they able and are they willing to give each other open feedback? If yes, that is already part of trust, yeah? We trust each other and we are able to give each other feedback: we really say what we’re thinking, yeah?” (IW2AK, Team consultant)

Another important aspect of maintaining trust is giving feedback, as the team consultant interviewed above expresses. This practice maintains trust because by giving each other open feedback, team members are acting based on the assumption that their message will be interpreted in an honest manner, and this reproduces the trust that is already set in place.

A special consideration regarding maintaining trust is conflict management. When conflicts are managed in a productive, constructive manner this maintains trust by allowing a good flow of information and by having a shared understanding of what is happening within the team.

“We’ll always have differences of opinion or different approaches to a project or a situation. And so in the past when we had to deal with say cross-functional conflicts fortunately it’s never been to a point where there’s like yelling and even god forbid resignations. (…) But there have been times where we’ve had to take time-out in
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meetings and just try to make sense of what was happening. If we’re having problems on delivering on what we agreed we need to get to the real issue: we can’t fulfill the requests or we’re not clear on what we are being asked of. Starting to get to the root problem to get to why there is a misalignment on expectations. Something like that, right? So it’s kind of like staying true to the objective, staying true to the initial plan, staying true to the team.” (IW6DZ, Project manager)

In the excerpt above, one of the project managers interviewed describes how the team uses the practice of taking time-out or lessons learned to solve a conflict created by a misunderstanding. The manager emphasizes that team members engage in interpretation and sense-making in order to understand the causes of the team issue, and to come up with solutions. When team members have a shared understanding and common expectations it becomes easier for them to focus on the tasks and objectives that they have to reach, staying true to the plan.

Some of the ways team members or project managers have chosen to act, to state that they do not feel comfortable in a certain area in which that they are not specialists, or even that they do not understand or know some information, are presented below.

“PM presents the HR risks as emphasized by K. yesterday. ‘I don’t know what the labor market in Morocco looks like! I’m not a specialist in recruitment and HR. I have to trust him’.” (Day2_Field_notes [21972:22131])

“S. asks while shaking his head and smiling ‘I mean, what if I don’t know something? How am I supposed to know all this information? It’s quite a lot’.” (Day1_Field_notes)

This means showing vulnerability but also showing to the other team members that there are skills or knowledge that one does not possess. The practice of admitting weaknesses and the fact that the team accepts them, enacting and perpetuating this, is distinctive to trust. As a consequence, the team starts acting as a safe environment for team members to ask
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questions, voice their opinion, and present even their more controversial ideas (see Chapter 3.2). Additionally, it allows the team to accept the mistakes that others have made because “we are all human beings,” and to become self-reflective, knowing exactly their team strengths and weaknesses.

“It was very awkward that it happened, but that is also OK, because we are all human beings, we sometimes act irrational, and it has to do with trust that this can be mended. And then how do you start getting back to normal shape? Somebody does the first step, sending an email: ‘Are you OK? Shall we talk about it again? Maybe just you and me... Or I hope I didn't say something that hurt you.’ Knowing that this person is kind of impulsive and that it will all boil down... Also knowing that there were other stress factors beyond the team, beyond the scope of the work, you know, that lead to that situation, that it all boiled up.” (FHIW1, Team member)

The practice of admitting mistakes is relevant because it allows the team to know where they stand in terms of strengths and weaknesses, so they can divide project responsibilities accordingly and be better equipped to achieve project objectives. Also, by practicing affirming that mistakes are ok and that everyone can make them, even the project manager, the team is more likely to learn.

“So yes, conflicts can be good for the team but just as long as, especially the professionals, team members don’t get personal and they talk through their position and defend it logically, and managers accompany and support these discussions in an honest and fair way.” (IW6DZ, Project manager)

For team reflections to occur, the company must have management and leadership tools to support this practice. In the paragraph above, the manager describes how this happens in an organizational culture of transparency and fairness. The management practice at the organizational level transfers to the practices that managers apply within the team.
Findings

When team members and managers talk about team practices that build trust, they emphasize the idea of creating a common, shared understanding; and when they refer to practices of maintaining trust, the underlying idea is that of acting on behalf of the team, based on these common assumptions.

Building and maintaining trust can be differentiated over time. Through repeated positive interaction and sharing of information, trust becomes relatively stable within the team, and interactions are frequent enough to keep the relationships going. Maintaining trust means that members of cross-functional teams work toward keeping trust afloat. They act according to their mutual interests and the rules of the game, and no one takes any action to erode trust. The need to provide strong evidence of trustworthiness (e.g., self-disclosure, predictability) decreases and the demand to maintain a continuous supply of information increases.

Trust exists because of the recurrent, routinized, planned activities performed by the members of cross-functional teams, but some activities predominate over others (both types of trust and distrust activities exist in teams). If the routinized activity of leaning-back and crossing arms predominates over leaning-in and making eye-contact, then these actions build and maintain distrust rather than trust (see Chapter 4.5).

Trust in teams has to do with habits or what is understood through routines and practices, so trust can be recognized within the team by looking at practices. Context and interpretation are essential for understanding the relationships between trust and monitoring, and trust and reflexivity. By analyzing the actions and interactions specific to these practices, as well as the nonverbal indicators and the organizational tools and resources that support them, several novel and contextual aspects emerge, which pertain to the nonverbal communication domain as well as to the organizational tools and resources that support building and maintaining trust in cross-functional teams.
Findings

The findings contain several novel aspects. The practice of team outings conveys the idea that informal activities function as trust building by engaging team members in processes of self-disclosure, development of common understanding, and management of expectations. Developing rules of the game emphasizes that in order to build and maintain trust, cross-functional teams must develop rules on how to share information (e.g., which information to share, with whom, in which format, and using which channel). Checking-in and checking-out shows that maintaining trust and managing multiple reporting relationships requires monitoring. Performing lessons learned emphasizes that in order to maintain trust, team members must be able to admit mistakes and show their vulnerability. Cross-functional teams need organized informal activities, rules of communication, monitoring practices and team reflexivity in order to build and maintain trust.

6.3 Production and Reproduction of Trust Practices in Cross-functional Teams

This section aims to answer the third research question: How are trust-building and maintaining practices produced and reproduced in a cross-functional team? What is the interplay between signaling, interpreting, negotiating, cooperating, and monitoring? Why is this (inter)action important for building and maintaining trust? (See Table 4) Conceptualizing trust as a social practice leads to building and maintaining trust emerging through behaviors of signaling, interpreting, negotiating, cooperating, and monitoring (see Chapter 4.2). These behaviors reflect the mental states of the team members, but overall they produce and reproduce the structures and resources of the team. In this analysis, the focus is on how building and maintaining trust happens in the interaction of team members.

To illustrate how a cross-functional team interacts to build and maintain trust practices, four team interactions observed during the workshop are analyzed: negotiating a team language, adopting rules of communication, developing a strategy to manage client expectations, and adapting the reporting tool. First the observation notes are presented, and
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then the interpretation is provided. Not all meaning-making actions (signaling, interpreting, negotiating, cooperating, and monitoring) become relevant in all interactions, because the model is meant to offer a prediction of what might happen (Figure 5).

These interactions occurred in a newly-formed cross-functional team. The team members and the manager met that day for the first time as a team; they did not have any previous interaction as a team, and the project had just been won a month before their meeting. Each team member knew that he or she was nominated to be part of that project team and would work with the project manager and other members from different departments and countries on developing a new product for one of their long-standing clients.

The rules and practices they assume in their first interactions derive from organizational practices, but they adapt and negotiate these and develop their own rules. The process by which this happens shows how trust is built in a cross-functional team. The author analyzed their first interactions as a team, where they had to negotiate and agree on several team decisions: a common team language, a structured way of communicating, a strategy to manage client expectations, and a change in the project reporting tool.

The first example illustrates how they use an organizational rule (English as the language of communication) and reproduce and adapt this rule in their team by using English formally and German informally. The second example demonstrates how the team produces new rules of communication by changing the organizational practices of writing long emails, and developing strategies to manage relevant and irrelevant information. The third example shows how the team discusses and produces a new strategy to handle client expectations, and the fourth example illustrates how the team reproduces the way reporting is done in the organization by adapting the organizational reporting tool and changing it to fit their functionalities and project requirements. These team interactions demonstrate the processes by which trust as a practice is built and maintained.
Findings

6.3.1 Negotiating a team language

Trust-building/Team interaction episode: In the beginning of the workshop, when team members enter the conference room everyone greets each other in German. The consultant is the first to use English and before starting the workshop, opens the discussion about a common language of communication, asking everyone to discuss which language they would prefer to use. The following reproduces their interaction:

1 “Consultant: ‘I know that some of us are not German native speakers, so I propose we start with a team decision: what is our language of communication?’
2 V. (smiling, looking at everyone): ‘Yes, I can speak German quite well, but I would prefer English…’
3 A. (nodding): ‘Me too, I would feel more comfortable if the communication is in English.’
4 PM: ‘To my knowledge everyone in this team speaks English well, we are a multinational organization, our emails and reports are in English, I think it makes sense to use English as this team’s common language. This should not be an issue, but this is a team decision and we should talk about it.’
5 Everyone nods in agreement.
6 Consultant: ‘Ok, then, next on our agenda we have a team exercise (proceeds to give further instructions).’
7 Now there is a lot of movement as everyone stands up and interacts with the others, asking questions and, after a while, forming a bigger group in the middle of the room.
8 When they identify the person and start to interview them, they spontaneously switch to German. For the two team members who are non-native the language of communication remains English. At the end of the team exercise, when they present in front of the whole group, S. starts presenting in German.
9 M. (looking at everyone): ‘We agreed English is our team language so let’s stick to that.’
10 PM: ‘Yes, please use English.’
11 Whenever one team member switches to German with the group, they are prompted by other team members that English is the team language. It is accepted that the discussion in the coffee breaks, lunch, and dinner is in German, while the meeting, the exercises, the presentations, and the emails are in English.’ (Observation notes, Day 1)
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Figure 12. Adopting a team language

Based on this interaction, Figure 12 shows the interplay between signaling, interpreting, negotiating, cooperating, and monitoring in the development and reproduction of this trust practice. Team members go from one sequence to another and, once the practice is adopted, it gets enacted by everyone in the team. The team members will monitor whether members follow this rule, by prompting.

How the cross-functional team adopts a common team language is demonstrated by analyzing the five processes of building trust. Since the majority of the team comprises native German speakers and the location of the team workshop is in Germany, naturally everyone starts greeting and speaking in German. The team consultant signals that team members speak different languages. Team members interpret this as a call for deciding on a common team language, and the two members who are non-natives express their preference for adopting English as a team language. This information gets the trust-building process going because the two members share their preferences openly and transparently. The project manager reacts and expresses his opinion by positioning himself as the formal leader and the propagator of company values, and emphasizes that the company is multinational and the formal
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communication is in English (L6-L9). After his intervention, the team nonverbally agrees that their team language will be English (L10). They use this rule to reinforce the organizational structure that is already in place (English as a language of communication within the company).

During the next team exercise, where team members must share personal information such as hobbies and languages, they unanimously switch to German, even though they had previously agreed on English as the team language (L13-18). There is a mutual, implicit understanding that this is accepted; the project manager does not address this or intervene, just letting things take their natural course. He signals that this rule of communication is rather flexible, since he did allow the others to speak in German. As this practice is adopted and enacted, they maintain it by prompting when a team member switches to German in formal activities like presentations and team exercises (L19, L20), but they accept using German in informal activities (e.g., coffee break, lunch, and dinner) (L21-24).

This example illustrates the relation between the production and reproduction of rules and structures. At first, the team imports the rules of the organization (English as the language of communication), but then adapts to the needs of its members. This is beneficial for trust building for several reasons. German native speakers feel comfortable sharing information openly, without fear that they will not be understood in English, and team members can build up confidence before going into the larger group. Research on work teams reveals that there are several personality types within groups (Levi, 2010). Some people who need more time to adapt will not be willing to accept the rules from the beginning. This team exercise is done in dyads, since it is easier to interact with a single person than with a whole group. But interactions between team members evolve rapidly, and soon a larger group forms where physical proximity is shared. This is an indicator that the trust-building process is in place (see Chapter 6.2).
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The team interaction reveals how signaling, interpreting, negotiating, cooperating, and monitoring behaviors reproduce the structures and resources of the team. The team consultant gives the signal to adopt a common team language, but it is interpreted, adopted, enacted, and perpetuated at the team level by everyone in the team. As discussed in Chapter 1.2, cross-functional teams deal with challenges of functional diversity. Therefore, one way of reaping the benefits of diversity is to build trust by addressing diversity from the start of the team’s development. In this case, the team gets the opportunity to negotiate and adopt a team language, preventing future possible sources of misunderstanding or misinterpretation.

6.3.2 Adopting rules of communication

Trust-building/team interaction episode: After lunch and a team exercise, the consultant presents the next team activity on the agenda: developing a team communication plan – the team’s rules of communication. At this moment, the project manager announces that he has prepared something already—a PowerPoint Presentation that he would like to share with the team. For the next hour or so, he presents detailed information about organizing and keeping track of documents, the team’s meeting schedule, communicating and sharing information in English, reporting, lessons learned, and risk management. At the end of the presentation, the Project Manager asks if that is something on which they can all agree and asks for their formal, written consent. All team members look at the project manager and at each other, but do not say anything, maintaining a few seconds of silence; then, they discuss sharing relevant information. The team interaction on this issue appears below as well as Figure 13:

1 “PM (looking at everyone): ‘We would need one week to clarify who is doing what. We don’t have that time. We are all specialists in our field. We have to rely on each other’s expertise, this is the only way we can be flexible and adapt fast.’

4 Team silence for a few seconds.

5 APM (looking at the PM): ‘Another aspect about communication is – what is good information and what is not so good information?’

6 M. (smiling): ‘Oh, yes, please don’t send long emails. Here in our company there are so many emails, we can’t read them all. They have to be short and to the point.’

9 Everyone smiles and shakes their head in agreement.

10 APM: ‘Yes, and then there’s the cc issue in this company. I think it’s possible to
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reduce these cc communications. I don’t think the Project Manager wants his email address filled with emails. A message has a specific recipient; other people don’t need to be informed.’

S.: ‘Maybe it’s a good idea to write in the subject if this is just for information (FYI) or if it requires action.’

A. (nodding in agreement looking at S.): ‘Oh, yes a very good point: if you really want just to inform specify that it requires no action.’

D. (smiling): ‘From our side in Purchasing, we really need the part number – this is very important to solve the issue.’

S. (frowning): ‘What if I don’t know it? How am I supposed to know all this information? It’s quite a lot.’

PM (nodding): ‘Yes, I propose you sit together and discuss the keywords, and then share the information within the team. Now, another thing I want to say that is important in our company is: be hard on facts but kind to people. Please write hello and good-by, we should respect and be polite to each other. Keep in mind you will also communicate with Morocco, Ukraine and China. Please always write please – it makes a huge difference.’

During the whole discussion V. and A., the two non-native German speakers speak the least. The consultant manages to write down the rules of communication and put them on the flipchart.” (Observation notes, Day 1)

Figure 13. Adopting rules of communication

Figure 13 depicts how the cross-functional team adopts a structure for sharing information by looking at the four processes that enable trust building. After presenting his expectations, the project manager signals that the team needs to create and adopt a strategy for sharing information. The team interprets this action as a call for finding a way to share information efficiently and effectively, and everyone in the team starts engaging in processes
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of negotiation and cooperation as they decide how to structure their communication process (e.g., how to write emails, who to put in copy, which keywords to use). As this practice is adopted, the project manager asks for their written consent to these rules of communication—a control mechanism that enables trust.

From the beginning of the exercise, the project manager takes the lead and manages the discussion by clearly stating his expectations and those of the organization for how the communication process in the team should work. The project manager emphasizes that there can be no change in the way the project will be documented and reported as he presents his expectations about the team meetings and the manner of corresponding. Clearly, certain aspects will be negotiated and others will not, and this particular aspect of sharing information will require a team decision. The administrative, organizational, and communication aspects of the project are non-negotiable, set from the beginning. The team relies on the clear and strong organizational structure, which is instrumental for trust building.

By clearly communicating his expectations, the project manager develops a shared understanding between team members about what is expected of them and, as previously discussed, this is a trust-building practice (see Chapter 6.2). At the same time, the project manager encourages everyone in the team to rely on each other’s expertise (L1-3). When the presentation ends, the project manager asks for the written signature of the team members that they have understood and are committed to respecting these rules. This written contract is the reason why, after the project manager asks them to comply, the team meets his request with silence, and everyone sustains this silence for a couple of seconds. Previous research shows that “contracts convey both trust and control, since both are a precondition and an outcome of contracting” (Möllering, 2002, p. 142).

The assistant project manager asking how they can differentiate between relevant and irrelevant information (L5-6) gets everyone talking, and they find out that this aspect of
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communication is very important to the team and reflects the communication within the organization (L7-9). Through cooperating and negotiating, they develop a standardized, structured way of corresponding by email, focusing only on relevant information (L13-19). Previous research on transformational models of trust (Lewicki & Bunker, 1996) shows that acting on behalf of the other is a practice of maintaining trust. In this example, the team members interact based on the assumption that they all know as a team and can decide which information concerns which function. But in considering this, they are also assuming the risk that information might not be shared with someone whom it may concern (L18-19). And so they give each other the power and responsibility to act on behalf of the others, assuming they have in mind the mutual interest of the team all the time.

This team interaction illustrates how signaling, interpreting, negotiating, cooperating, and monitoring behaviors reproduce the structures and resources of the team. Relying on the project manager is an important structure on which trust builds in a cross-functional team (L20-21). But the project is so complex in terms of information, knowledge, and decision-making, that team members must rely also on internal resources to make decisions, taking ownership and control over their tasks and some parts of the project process (see Chapter 1.2). Clearly defining which decisions are the responsibility of the team and which decisions will be made collaboratively by the team members and the project manager will have a positive effect on the trust-building process.

6.3.3 Developing a strategy to manage client expectations

Trust-building/team interaction episode: The following discussion occurs on the afternoon of the first day of the team workshop. After completing several tasks, the consultant asks the project manager and the team members whether they want to end the activities for the day or already start the stakeholder analysis task and finish it the next day. The team members decide that they want to start working on the analysis, because they accomplished a lot and
there is good, productive energy in the team. During the first part of the stakeholder analysis, the team members start to discuss the reporting relationships that the team has with their client and project owner. There is an exchange of information and the team members talk about several strategies for managing client expectations. Below, the team interaction that picks up on these issues is reproduced:

1 “M.: ‘They expect transparency in communication. They always say our overhead cost is too high at 4% - they say every other competitor can survive with 1% why can’t we?’
2 That’s what they told us. That’s the game and they are playing games with us.’
3 The other team members murmur in agreement.
4 PM: ‘Yes, we need a strategy to manage our client – to develop trust while avoiding total transparency. The assembly line is where we can reduce costs and make profit and they don’t need to know that. Our strategy is to develop the feeling of transparency without giving it to them.’
5 B. (frowning): ‘But how do we do that?’
6 M. (smiling): ‘That’s why we’re here: to find a way. A strategy, that I know from one of our competitors, is that they have 2 catalogues: one internal and one external, that they share with the client. That could be a possible way.’
7 PM (shaking his head): ‘Yes, we need to make them believe that is reality, when in fact it’s not.’
8 V. (looking at the PM): ‘I know [Name of company competitor] is doing that too.’
9 M.: ‘Nevertheless, this strategy is tricky and risky. On top of that it means double the work.’
10 A. (looking at everyone in the team): ‘Yes, but we should at least think about it.’
11 M. (looking at the PM): ‘I don’t mean to be impolite, but maybe this could be discussed higher up.’
12 They all shake their heads in agreement.
13 PM: ‘Just to wrap it up, I think each person has another priority when it comes to stakeholders. That’s a challenge. We can discuss this strategy together with the PO, once we have our priorities in check.’” (Observation notes, Day 1)
Figure 14. Developing a strategy to manage client expectations

As Figure 14 shows, the sequence of signaling, interpreting, negotiating, and cooperating processes emerge as team members discuss a strategy to manage client expectations. M., the sales manager, signals that the client’s expectations are unrealistic and that ‘they are playing games with us’ (L1-4). His interpretation of this is that the client is behaving in a dishonest and unfair way by asking them to cut down their overhead costs. He assumes that the team agrees with him and interprets the information in the same way when he says that it is impossible for any competitor to offer such a low cost for personnel. His assumption is right because the other team members nonverbally signal their agreement (L5). The project manager reinforces this shared understanding by immediately agreeing with M. and saying that they must find a strategy to manage the client by offering the illusion of trust (L4-7). This trust-building process happens because everyone in the team is acting with the mutual interest of the team in mind: The project must be profitable for the company while meeting their client’s requirements.

The team then engages in processes of negotiation and cooperation as they discuss possible strategies to manage client requirements and how to have a good relationship with the
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client, and meet expectations while making the project profitable for their team and their company. Although there are some objections (L8, L15), M., V., and A. offer suggestions for implementing this strategy (L9-11, L14, L16). They all agree that this is a strategy to consider because they nod in agreement (L19). The project manager suggests offering the feeling that they are transparent and honest with the client, when in fact the products are much cheaper, so that the company can make a profit. This is evidence of maintaining trust, because the team members share the implicit understanding that they can adopt a risky strategy and that this sensitive information will not leave the team setting. Even though they do not explicitly ask for a formal agreement at any time during their interaction, there is an implicit understanding of loyalty, signaled nonverbally, that all team members will not betray the team by sharing this information outside the team.

M. adds that the strategy presents substantial risk, that there are many difficulties involved, and perhaps this would be a decision for the management to make and not the team (L18-19). The project manager suggests postponing this decision for later when they will engage in a project risk analysis and the project owner will also be involved (L21-23). As in the previous example, it remains unclear which decisions are the responsibility of the team and which ones upper management should make. This might lead to misinterpretation and possible breaches of trust.

This team interaction shows how signaling, interpreting, negotiating, cooperating, and monitoring behaviors produce the structures and resources within the team. Taking ownership builds trust, but as highlighted above, it is yet unclear or remains to be clarified which decisions are the responsibility of the team and which are the manager’s decisions. Clearly defining which decisions are the team’s responsibility and which will be made collaboratively by the team members and the project manager will have a positive effect on the trust-building process.
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6.3.4 Adapting the reporting tool

Trust-building/Team interaction: On the second day of the workshop in the morning, the Project Manager presents a project-management tool recently implemented across the organization. He gives a presentation demonstrating how this new tool works, the importance of the work-breakdown structure, and why they must use this tool. Team members pay attention, take notes, ask for clarifications, and express their concerns. Their interaction is reproduced below.

1 T.: ‘But I don’t think it really works for everyone. For another project I sent my milestone information and it didn’t fit the project milestone.’
2 V.: ‘We will do it differently then. We still need to get everyone to have an overview.
3 We need to have the same understanding. So far we don’t.’
4 PM: ‘First we need to have the input and then we can discuss with the whole team.’
5 T. (shaking his head): ‘Ok, I agree.’
6 M.: ‘This project tool is created specifically for our company. There is some flexibility and room for discussion… but it cannot all be planned in really all the details but in overall milestones set by the client.’
7 Everyone is actively listening and taking notes.
8 B. (frowning): ‘But how was this tool developed and how were these work packages designed? They don’t make any sense!’
9 PM: ‘They were developed based on information from workshops with people from all across our company’s departments.’
10 T.: ‘But the information in the software is too general. What we do is much more complex than that.’
11 V. (shaking his head in agreement): ‘What I can suggest is that if you want to change something you contact me. We will make it work, we have your back.’
12 Now the Project Manager shows an example of how to change information in the project reporting system.’ (Observation notes, Day 2)
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Figure 15. Adapting the reporting tool

Figure 15 shows the sequence of trust behaviors as they occur in this team interaction. T. signals several weaknesses in the project management tool that the organization has recently implemented (L1-2). It is the second day of the workshop, and by now interactions have been open and discussions are becoming more and more structured, since members are already using the rules developed throughout the first day. This is a clear indication of trust building. In response to T., V. interprets his suggestion as a proposition to change the structure of the reporting tool and, for that matter, he assumes everyone in the team agrees to do it differently. But then he emphasizes that in order to do that, they must have a shared understanding of the project (L3-4) still to be reached, but there is a good basis on which the interaction starts. The project manager agrees to this when he adds that the team still needs additional information (L5). T. also agrees (L6), while M. adds information about the structure and purpose of the organizational tool (L7-9). B. gives his own candid interpretation and addresses a key weakness of the project management tool—the lack of specificity in the work packages (L11). T. agrees with him, while the project manager and T. start negotiating and cooperating by highlighting that the tool can be adapted to fit their team and project requirements (L12-15). V. adds that
they will support each other if they have any changes that they want to make to the project tool and the structure (L16-17).

These interactions demonstrate how trust practices are produced and reproduced by processes of signaling, interpreting, negotiating, cooperating, and monitoring. Team members already trust each other enough, so there is a strong basis for a good flow of information and communication in order to work on the already existing reporting tool. This consists of a bottom-up approach, because a team member signals that the reporting tool must be changed and adapted in order to fit the requirements of the project, and so the team agrees to do this. What the team members address from the beginning is immediately supported by the manager. The project manager had previously stated: “You are the specialists, you know what the best option is; we have to trust each other.” This means that team members must on the one hand take responsibility and make decisions, and on the other hand speak up and voice their concerns, whatever these may be. Speaking up and voicing concerns act as trust-maintaining mechanisms because meaning is perpetuated within the team.

This team interaction shows how signaling, interpreting, negotiating, cooperating, and monitoring behaviors reproduce the organizational structures and resources. The project reporting tool is an organizational resource designed to help team members and managers plan, organize, and monitor their projects. But, as with any organizational value or tool, the team does not merely import it but must adapt it to their own needs. This adaptation and sense-making results in building trust.

During the team workshop, trust building as a practice emerges in cross-functional teams and the interpretive analysis demonstrates how team members decide on a common working language, develop a structured communication plan, make a tentative decision to develop a strategy to manage client expectations, and adapt the project-management tool. This analysis is structured by addressing five processes through which trust is produced and
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reproduced (signaling, interpreting, negotiating, cooperating, and monitoring). These interactions matter because they demonstrate how trust as a social practice emerges through the production and reproduction of rules and structures.

This chapter presented the research findings and explored the complex meanings and interpretations that team members, managers, and consultants give to trust. When people make sense of how trust is built and maintained they use metaphors. There is a certain connection between metaphors and trust practices (i.e., we need metaphors to make sense of trust-building). Metaphors are not the same as practices but are tools that help us visualize and understand trust practices. Trust practices are recognizable patterns, bundles of meaningful activities that emerge and are perpetuated within the team in sequences of processes (i.e., signaling, interpreting, negotiating, cooperating, and monitoring). Processes are actions and team behaviors (i.e., interaction patterns, meanings of verbal and nonverbal behavior). Together, these findings demonstrate the value of adopting a practice approach and the potential for future studies on trust metaphors (see Chapter 7).
7. Discussion

This chapter first summarizes the findings of the research project, then discusses their theoretical implications. The implications of this study for conceptualizing trust as a social practice are presented, particularly with regard to the conceptual framework on a practice approach for conceptualizing trust (see Chapter 4.3), along with how these findings relate to previous literature on trust in cross-functional teams. Several practical implications are suggested, and the limitations of this study are discussed, concluding with future research perspectives that follow from the findings.

7.1 Research Summary

This thesis looks at building and maintaining trust as social practices. It focuses on the beliefs, the actions, and interactions of team members, managers, and consultants working in cross-functional teams in their real-life work context. The study employs interviews and observation as methods of data collection, and qualitative content analysis, metaphor analysis, and interpretive analysis as methods of data analysis. The main research question of the thesis is: How are trust practices conceptualized and produced in cross-functional teams?

This research project proposes an alternative conceptualization of trust as a social practice, for which the unit of analysis is the practice. Moving beyond shared beliefs of trustworthiness between team members to trust practices, as collective actions and interactions between team members, allows exploration of a comprehensive, holistic view of trust. An in-depth description of how trust practices are conceptualized is offered by analyzing the metaphors used by team members, the trust practices that they describe, and the interactions observed during a kick-off workshop.

The metaphors that participants describe during the interviews reveal the tensions and paradoxes of building and maintaining trust in cross-functional teams (i.e., recipe, tempo, flow, energy, improvisation). The recipe metaphor captures the idea that while a part of the trust-
building process unfolds in a reproducible, stable manner (the antecedents that lead to trust building) several other aspects make building trust nonreproducible and contextual (the influence of individual, team, organizational characteristics). The metaphor of flow reconciles the taken-for-granted nature of trust (as organizational value) with the active building and maintaining of trust in which team members engage (the constitution and reproduction of trust). While trust is taken as a basis for starting their work relationship, managers and team members actively work on reproducing and maintaining trust. The energy metaphor highlights how trust as a resource transforms and increases by usage, and how both trust and distrust are required for a healthy, functioning team. The idea of trust as improvisation offers a different image than the idea of trust as flow, routine because it shows that cross-functional teams need both structure and flexibility to build trust.

Four trust practices that members of cross-functional teams describe and enact are captured: team outings, rules of the game, checking-in and checking-out, and lessons learned. Analyzing the actions specific to these practices, as well as the nonverbal indicators and the organizational tools and resources that support them, illustrate the novel and contextual aspects that refer to nonverbal communication and to organizational tools and resources that support building and maintaining trust in cross-functional teams. Nonverbal indicators are equally important to building and maintaining trust, and trust is an embedded organizational phenomenon, with organizational tools and systems that support the practices of building and maintaining trust (e.g., team budget, communication system, reporting system).

Then four interactions between team members are analyzed as team decisions are made: adopting a team language, producing new rules of communication, developing a client management strategy, and adjusting the reporting tool. These interactions reflect the mental states of the team members, but more than that, they show how team members produce and reproduce the structures and resources of the team. Analyzed in these interactions are ways that
trust practices are produced and reproduced, by focusing on the processes that happen at the team level (e.g., signaling, interpreting, negotiating).

The first interaction illustrates how the team uses an organizational rule (English as the language of communication) and reproduces and adapts this rule by using English formally and German informally, both building and maintaining trust. The second interaction demonstrates how the team engages in new rules of communication by changing the organizational practices of writing long emails and developing strategies to manage relevant and irrelevant information. The third interaction shows how the team discusses and produces a new strategy to handle client expectations, and the fourth interaction illustrates how the team reproduces the way reporting is done in the organization by adapting the organizational reporting tool and changing it to fit its functionalities and project requirements (trust maintaining practice of performing lessons learned).

The next section discusses the theoretical contribution that this project brings to trust research.

7.2 Theoretical Contribution

The present study offers an alternative theoretical approach to conceptualizing and operationalizing trust in teams, from a practice perspective. Also, it illustrates this conceptualization empirically by capturing the descriptions of team members, managers, and team consultants, the different practices that build and maintain trust, and the interactions by which members of a cross-functional team produce and reproduce these trust practices.

So what do we know now that we did not know before this study? How does this study affect the way we conceptualize trust and trust building in cross-functional teams—and possibly beyond? There is more to analyze on trust at the team level than was known before. Conceptualizing and operationalizing trust as a social practice has been demonstrated, and a field research design illustrated how to approach this conceptualization. This study affects the
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way building and maintaining trust in cross-functional teams in particular and in teams in
general are conceptualized, because it explains how trust develops from team interactions. It
paints a picture that incorporates the opinions and thoughts of team members about how trust
in teams develops, and the interactions as they unfold in a newly formed cross-functional team.

Why is a practice perspective on trust in teams a good alternative to shared beliefs of
trustworthiness? Looking at trust from a practice perspective reveals more than can be
discovered by studying shared beliefs. A practice perspective offers a framework that
incorporates the actions, interactions (behaviors), and structures in which these beliefs are
embedded (not only team members, but also systems and interactions). Table 7 below shows
how a social practice approach to trust adds to our understanding of trust compared to rational
and affective, swift trust, and transformational models that were discussed in Chapter 2.

<table>
<thead>
<tr>
<th>Trust approach</th>
<th>Rational and affective models of trust</th>
<th>Swift-trust model</th>
<th>Transformational models of trust</th>
<th>Practice approach to trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research questions</td>
<td>What are good reasons to trust others? Trust comes from perceived trustworthiness and emotional bonds</td>
<td>What is the basis upon which team members trust? Trust is based on institutions and comes from taken-for-granted rules, roles and routines</td>
<td>How do team members learn to trust each other? Trust develops over time, as relationships develop and grow</td>
<td>What do team members do to build and maintain trust? What bundles of activities do they produce and reproduce?</td>
</tr>
<tr>
<td>Focus</td>
<td>What is given (observable behavior)</td>
<td>What is given (rules, roles, routines)</td>
<td>What is becoming (learning, transformation)</td>
<td>What is done (interaction, activities, doings and sayings)</td>
</tr>
<tr>
<td>Essence of trust</td>
<td>Indicators of trustworthiness represent predictability; people look for good reasons to trust (calculative trust, ABI, liking)</td>
<td>Placing and honouring trust is part of a routine; people trust because ‘that’s just what you would do’</td>
<td>Focusing on transformations in the meaning of trust through interaction; people have a history of their relationships and the emphasis is on what</td>
<td>Trust is contextual, trust is built and maintained in practice in what people say and do, it is inscribed in</td>
</tr>
</tbody>
</table>
Table 7. Overview of theoretical approaches on trust

| and being liked by others) | starts the change in trust | their bodies and in their social context |

Discussion

As Table 7 illustrates, while rational and affect models of trust explain what members believe, trust as a practice helps in understanding how they come to trust. Shared trustworthiness beliefs show how team members come to trust each other, but they are not enough to explain what happens at the team level, because team interactions and organizational embeddedness are not considered. This thesis proposes that paying attention to trust practices that are produced and reproduced at the team level better explains how trust is built and maintained in team interactions.

The findings of the study demonstrate that metaphor analysis offers a rich and complex insight into trust in cross-functional teams. This is by no means the first study where trust has been explained using metaphors. Throughout the literature on organizational trust, metaphors have been used frequently to define and explain the main characteristics of trust. Trust is pictured as a social glue, the foundation for cooperation (Rousseau et al., 1998), the building block of organizations (Zaheer, McEvily, & Perrone, 1998), an intangible asset (Lewicki et al., 2006), and an organizational resource (Mayer et al., 1995; Schoorman et al., 2007).

Initially, the metaphors were an emergent category in the coding framework, and as the analysis went further, the importance of these metaphors for conceptualizing trust was discovered. Thinking metaphorically reveals many characteristics of a phenomenon because it comprises of a whole network of analogies (Geary, 2012). Trust metaphors matter because they create expectations and influence decisions, and this is meaningful for future research. By analyzing trust metaphors, it is possible to reinterpret and add to preexisting models of trust development.

For instance, the recipe metaphor reveals several aspects that the literature discusses, but also new ones. Rational and affective models of trust (Chapter 3.2), most notably by Mayer
Discussion

et al. (1995), can be understood as a straightforward recipe for trust building. Based on propensity to trust and perceptions of trustworthiness (ability, benevolence, integrity), team members decide to trust and engage in trusting behavior. But a predefined, reproducible way of building trust falls short because it develops spontaneously and is contextual, depending on multiple factors such as team composition, management styles, and organizational characteristics. The contextual factors that influence building trust must be taken into account because contextual information provides a richer understanding of the process.

The swift-trust model does not emphasize the idea that team members actively work on maintaining and reproducing trust (Möllering, 2006; Jagd, 2010). The flow metaphor suggests that trust is enacted and perpetuated by team members who change and adapt its meaning according to their work relationships. Incorporating this idea in routine models of trust better explains the complex relationships between agency and structure: Team members engage in a complex process of creating meaning based on organizational structure.

The metaphor of trust as tempo conveys the idea that coordination and synchronicity are practices that help maintain trust in cross-functional teams. Visualizing the coordination and synchronicity that develops as team members learn about each other shows how trust is maintained in transformational models of trust (Lewicki & Bunker, 1996).

The energy metaphor nicely captures the transformational models of trust development (Lewicki & Bunker, 1996; Zand, 1972). Trust leads to more trust, the energy builds up, like a resource that increases with use. The more team members act based on trust, the more they build and maintain trust. Distrust functions in a similar way, leading to more distrust; the more team members act based on distrust, the more they will maintain distrust within the cross-functional team.

The metaphor of trust as improvisation offers a nuanced understanding of the process of building trust that is set between rational and affective models of trust and swift-trust model
Discussion

(Section 3.3). While rational and affect-based models of trust explain how people select or build good reasons to trust (Mayer et al., 1995) and develop emotional bonds within a team (McAllister, 1995), the swift-trust model considers shared membership in an organization and team roles as sources of trust, with their taken-for-granted routines (Meyerson et al., 1996). The image of trust as improvisation expresses the complex relationship that exists in the process of building trust, in which team members require not only a certain level of knowledge about the others (competence, emotional bonds), but also an organizational structure to support the development of these relationships within cross-functional teams. Without structure, there would be no basis upon which to improvise or “do trust”.

These findings connect back to research on metaphors in organizations especially Cornelissen, Holt, and Zundel (2011), and Cornelissen, Oswick, Christensen, and Phillips (2008) by demonstrating that team members use metaphors to make sense of building and maintaining trust but also to influence decisions on trust. In strategic change, metaphors are core processes of framing that enable support and buy-in from key stakeholders (Cornelissen et al., 2011) and they are used to legitimize the process of change (influence outcomes and decisions).

The findings on the production and reproduction of trust practices support Möllering’s (2013) view of trust as a process of constituting that takes form within the social system of the team in which it is embedded; and as a process of producing and reproducing the practices in this system. In spite of calls for a process view in trust research, few scholars have drawn on this perspective (Fuglsang & Jagd, 2015; Möllering, 2013; Nikolova, Möllering, & Reihlen, 2015). This study shows the opportunity to research trust from a practice perspective and contributes to the literature on process views of trust by showing how trust is produced and reproduced within the team.
Discussion

In several ways, this research project extends the work of Lander and colleagues (2004), who looked at communication practices that build trust in project teams by emphasizing the role of nonverbal communication practices. Here, nonverbal indicators such as physical proximity or distance and displaying positive language are shown to be important for building and maintaining trust in teams. This finding is in line with research on signaling trustworthiness through nonverbal cues from micro-expressions in teams (Centorrino et al., 2015; Cheshin et al., 2011).

Regarding practices of building and maintaining trust, previous studies show that informal activities function as trust building by engaging team members in processes of self-disclosure, development of common understanding, and management of expectations (Fulmer & Gelfand, 2012; Wilson, Straus, & McEvily, 2006). But the findings presented in this thesis show that the idea of team outings represents both a trust-building practice in itself and evidence that the trust-building process has started, as the nonverbal indicator of maintaining physical distance or proximity demonstrates.

Frequent interaction and information sharing build and maintain trust in teams (Jarvenpaa & Leidner, 1999). But for cross-functional teams, it is vital to establish rules and routines as a trust-maintaining practice—rules of the game—about which type of information to share (relevant and irrelevant information, sensitive information that cannot be shared outside the team, and information that can be shared with other departments and with stakeholders); how this information is shared nonverbally (positive and negative nonverbal signals); and by which communication channel (email, chat, face-to-face, phone).

The literature is substantial on trust and control (Möllering, 2005; Jagd, 2010), but the practice of checking-in and checking-out goes further, because it explores their complementary relationship and the importance of the meaning that team members give to their interactions. In line with Möllering (2005), trust and control are expressed here as a duality, because team
Discussion

members maintain and perpetuate trust by keeping promises and not betraying the team, but also by monitoring what the others are doing.

Team reflexivity mediates the relationship between trust in teams and team performance (De Jong & Elfring, 2010), and this study shows how team members, managers, and consultants maintain trust by performing lessons learned. Celebrating the teams’ success, giving feedback, admitting mistakes, and managing team conflicts maintain trust.

These findings show the opportunity to research trust as a practice and this connects to overall research on organizational practices. The main contribution of the practice lens is that of explaining trust as a process by incorporating the concrete and material activities in which team members are involved (Nicolini, 2012; Schatzki, 2005). Similarly Jarzabkowski & Seidl (2008) pushed research on strategy in the direction of strategy as practice.

Studies on trust in cross-functional teams have been mostly quantitative, but this dissertation makes a qualitative contribution. The chosen field-study approach enabled investigation of the process as it unfolds in the “real world” context, thus gaining ecological validity. Focusing on a rather uncommon method of data collection for team trust—team observation—highlighted the advantages of looking at trust from this angle. What is more, this study incorporates the views and interactions of all the different members involved in the production and reproduction of trust in cross-functional teams (team members, managers, and team consultants). This adds complexity to the process and also shows differences in how team members conceptualize trust more in terms of building trust, while managers and consultants emphasize maintaining trust (Chapter 6.1).

7.3 Practical Implications

Developing trust practices is useful for organizations that want to minimize the challenges that come with cross-functional work. As previous research has found developing trust in cross-functional teams is difficult to achieve because of the functional diversity,
Discussion

ambiguous information, sometimes conflicting goals and multiple reporting relations (see Chapter 1.2).

Managers and team consultants can better manage these challenges by developing and fostering trust practices as explained in this study. For instance, at the beginning of team interactions managers and consultants should pay attention not to over-regulate certain practices such as rules of the game. Setting up the rules at the beginning of team members’ interaction is not helpful for building trust. As the relationships progress and trust develops, team members design flexible rules together. This is also highlighted in the checking-in and checking-out practice, where control maintains trust as team members interpret and give meaning to their tasks, deciding when control is needed and for which tasks or phases of the project.

Also, managers should pay attention to nonverbal indicators to better grasp the patterns of interaction taking place at the team level. For instance, by looking at indicators such as physical proximity or distance, managers can better understand whether the process of building trust has started. A special consideration here is the congruence (or lack thereof) between the information shared and the nonverbal indicators, as these are signs of trust.

The findings in this research project address some of the issues encountered by team consultants and trainers when designing team interventions and kick-off workshops. First, understanding trust as a social practice emphasizes the idea that exercises and activities must be addressed at the team level. Changing team behavior requires looking at team interactions as repetitive, meaningful, and often unconscious patterns of activities that represent more than the sum of dyadic relations (see Chapter 4.3). Second, the description of the trust building and maintaining practices presented in this research project helps consultants and trainers design better kick-off workshops, because they can pay attention exactly to interactions that build and
maintain trust. Standard kick-off workshops focus on team development and project monitoring; a good alternative would be to concentrate on trust building and project planning.

7.4 Limitations

As is the case with all research projects, the contributions of this thesis are discussed considering its limitations. This section acknowledges and reflects on the ways these limitations affect the conclusions that we can draw from the findings.

First are the sampling-procedure issues (see Chapter 5.6). The sample for the interviews is different than the sample in the cross-functional team that was observed. The interview and observational data were analyzed together on the assumption that a maximum-diversity sample would offer a multitude of opinions and stories about multiple teams and maximize the possibility of identifying the common patterns of interactions and bundles of activities that characterize these teams. Limited access prevented interviewing the members of the cross-functional team observed, but for future studies, this would be ideal because it would offer the possibility of complementing how they interacted with their views on the interaction. Since the purpose of this thesis is to explore whether conceptualizing and measuring trust as a social practice is possible and what results these yields, this methodological approach of having a maximum-diversity sample works well.

While field research provides deep insight into a phenomenon, it does not offer empirical generalizability (Yin, 1994). These findings do not claim to hold true universally across all contexts, although they do indicate transferability across comparable contexts. With transferability, the core concern is not to generalize to an abstract and decontextualized population, but to determine whether the trust-building practices identified in one specific context also apply to other cross-functional teams. The extent to which the findings can be transferred from one case to another depends on the similarity between the respective contexts.
Discussion

“Assessing the similarity of a source and a target context in turn requires detailed information about the context in which the study was conducted” (Schreier, 2017, p.7).

A full description of the characteristics of the interview sample and the context in which the team is embedded are provided (see Section 5.6), supporting the expectation of identifying similar trust-building practices in cross-functional teams characterized by functional and cultural diversity, a new project-management tool, and new customer-reporting tool.

Another point worth considering is the strong self-selection bias regarding the sample of interviewees and participants in the kick-off meeting. The methods chapter (see Section 5.3) explains that the participants were interested in the topic (thus, a high response rate) and had extensive work experience either building or maintaining trust within their teams. In the interviews, participants were asked to recall stories about their teams, which could present a strong memory bias, particularly the self-reference effect, where self-related encoded phenomena are better recalled than similar information encoded otherwise. Nonetheless, these experiences have played an important role for their professional and personal development as evidenced by the considerable detail they offered about the events that happened in the team.

The observation consisted of a single cross-functional team over a relatively limited period of time, and the author was only able to interact with the members of this team during the informal coffee breaks, lunch, and dinner. This team was carefully selected to fit the criteria required by the research question, and the interactions of team members, the manager and the consultant were captured at a very critical time in the development of this team, namely during the kick-off workshop (see Chapter 5.2).

7.5 Future Research Directions

This research study shows the opportunity to study trust as a social practice, and to adopt metaphor analysis and nonverbal cues in research on trust in teams.
Discussion

Trust as a social practice means analyzing repetitive, meaningful, and often times unconscious bundles of interconnected activities that are contextual and temporal. This is relevant for focusing more on understanding than on prediction. Conceptualizing trust as a social process rather than trust as shared beliefs or psychological state emphasizes that trust is a process connected with other organizational processes and embedded in an organizational setting. Trust as a social practice thus moves research from the path of demonstrating that trust in teams is important in contexts of high vulnerability and uncertainty, to the path of how trust becomes important in these contexts by meaning and interpretation (i.e., signaling, interpreting, negotiating, cooperating, and monitoring).

Further research can build on the findings presented here and explore how trust as a practice in cross-functional teams evolves. How do trust practices evolve over time? How do these practices become institutionalized if they are produced and reproduced within the team? How do trust practices in cross-functional teams vary across cultures? How does the type of project influence trust practices? Because the cross-functional team observed in this study works on developing a new product (nonroutine task), a further step would be to investigate whether and how far the trust practices described vary according to project type. Practices such as team outings and lessons learned are expected to be present regardless of project type, but checking-in and checking-out might be a practice that is specific to new-product-development projects, where maintaining trust and innovating require both control and improvisation (see Chapter 3.4).

Trust metaphors are important because they create expectations and influence decisions. For example, the inherent tension in rules of the game enables trust, and then trust enables improvisation with less control and going beyond the rules. Metaphors activate analogies and make it possible to grasp complex ideas. When team members and managers use metaphors, they influence each other and the team decisions they are about to make by shifting
Discussion

in similar frames of analogies. Building on these findings, future research could explore how trust metaphors influence team decisions in newly-formed cross-functional teams. Developing several metaphors of trust that highlight trust maintenance can activate analogies for members of cross-functional teams to be more process-oriented, rather than task-oriented.

Also, metaphor analysis makes possible capturing the abstract nature of the dynamics of trust, as well as the sensitive topic of trust repair. On the basis of the current study, for example, metaphor analysis applies to data collection and data analysis on breaches and violations of trust and on trust repair. Trust breaches and trust repair are sensitive topics to discuss within the team, but by using metaphors, members are more likely to open up and explore these issues if they are presented in such an abstract form. This offers the opportunity to discover complex nuances of trust repair. One suggestion for future studies is to further elaborate metaphor analysis in order to obtain rich and diverse data for advancing a practice perspective on breaches of trust and trust repair.

By connecting practices with metaphors and considering that using metaphors in teams is a trust practice, future research can explore: How do team members use metaphors when they are engaging in trust practices? This thesis demonstrates that team members need metaphors to make sense of trust-building but, also that team members use metaphors actively to build trust in order to express to others what the relationship is about, what is at stake, and how they see their relationship developing. In this research project there is a connection between metaphors and practices—we need metaphors to make sense of trust-building—future research can make that connection stronger and study how team members actively use metaphors to build trust.

While it is beyond the scope of the present study to discuss and analyze the role of nonverbal interaction in depth, it is a promising avenue for future research. This study reveals that several nonverbal characteristics (e.g., physical distance, posture, gesture, mimics) appear
Discussion

both as indicators and mechanisms of building and maintaining trust in cross-functional teams, which leads to further investigation. How do nonverbal indicators influence trust maintenance? And how does nonverbal interaction influence trust repair? Scholars could focus on this in their future studies and observe nonverbal interaction in teams, enabling holistic understanding of interactions, relationships, and gestures.
8. Conclusion

The message of this research project is: Trust is a social practice built and maintained in interaction, in the relationships between team members, managers, and consultants, embedded in organizational tools and systems. Trust practices are both a result and an indicator of this interaction—a relatively stable, agreed-upon, and enacted way of doing things in the team. The findings of this research project are important theoretically because they show how trust practices are conceptualized and practiced in cross-functional teams; and practically because the practices help overcome the challenges of cross-functional teamwork. This research underpins much needed future studies to further develop trust in cross-functional teams from a practice perspective, to use metaphor analysis as a method for researching trust, and to focus on nonverbal indicators of trust in their analysis.
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## Appendix A

### Interview guide

<table>
<thead>
<tr>
<th>Interview questions</th>
<th>Follow-up questions</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand that you have been working for more than ten years as a management</td>
<td>1.1 What does your work involve?</td>
<td>(Merriam, 2009; Rubin &amp; Rubin, 2012)</td>
</tr>
<tr>
<td>consultant/team member/team manager.</td>
<td>1.2 What aspects of your work do you like?</td>
<td></td>
</tr>
<tr>
<td>1. What brought you to work in this field?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How would you describe a team you have worked with that you are proud of?</td>
<td>2.1 How would you describe a successful team? What about an unsuccessful team?</td>
<td>(Merriam, 2009; Rubin &amp; Rubin, 2012)</td>
</tr>
<tr>
<td></td>
<td>In your opinion what role (if any) does trust play?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2 Can you tell me more about trust in teams, what does it mean to you?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 How do you recognize trust in teams?</td>
<td></td>
</tr>
<tr>
<td>Context</td>
<td>3.1 Type of industry (production/consultancy/government)</td>
<td>(Howorth et al., 2004)</td>
</tr>
<tr>
<td>3. Let’s go back to the team you are proud of and talk about the organization that</td>
<td>3.2 Values of the organization (competitive/collaborative culture)</td>
<td></td>
</tr>
<tr>
<td>team was working for and your role.</td>
<td>3.3 Private/family/government owned</td>
<td></td>
</tr>
<tr>
<td>3.4 What was your role? What did you have to do for that team?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Now I would like to discuss with you the specifics of that team, could you tell</td>
<td>4.1 Team structure and roles</td>
<td>(Hyatt &amp; Ruddy, 1997; Kiffin-Petersen &amp; Cordery, 2003; Spector &amp; Jones, 2004)</td>
</tr>
<tr>
<td>me more about…?</td>
<td>a) team composition (number of members, background, culture, expertise, gender)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) type of team: permanent/temporary; hybrid/co-located/virtual; self-directed/managed;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Team structure: formal/informal; self-directed/formal leader; was the team leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>formally assigned or did she emerge as one?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) team dynamics and roles: clear/unclear roles assigned by the team leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2 Overall purpose of the team</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) organizational change (merger, acquisition, downsizing, outsourcing) or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>innovation (new product development)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) task complexity, interdependence and clarity</td>
<td></td>
</tr>
<tr>
<td>Trust-building</td>
<td>5.1 How was everyone introduced?</td>
<td>(Child &amp; Mollering, 2003; Möllering, 2013; Nikolova, Möllering, &amp; Reihlen, 2015)</td>
</tr>
<tr>
<td>5. How did that team start off?</td>
<td>5.2 Was everyone enthusiastic about working in that team/project?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.3 How frequent were the interactions within the team (meetings, calls, emails)?</td>
<td></td>
</tr>
<tr>
<td>6. How were the initial interactions within that team?</td>
<td>6.1 How did everyone share information?</td>
<td>(Child &amp; Mollering,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.2</strong> Did everyone know who was doing what?</td>
<td>2003; Möllering, 2013; Nikolova, Möllering, &amp; Reihlen, 2015</td>
<td></td>
</tr>
<tr>
<td><strong>6.3</strong> Was it clear what was expected from the team?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.5</strong> Were there any perceived risks in the beginning? Did trust play a role?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**7. How did that team further develop?**

| **7.1** Were there regular check-ups? |
| **7.2** How was the team performance evaluated? |
| **7.3** How were decisions taken in that team? |
| **7.4** What role do you think trust had? |

**8. Was there a turning point in the development of that team?**

| **8.1** Team coordination: was it easy for the team members to coordinate? Thug of war: were some members pulling against other members? Why (not)? |
| **8.2** Team motivation: was everyone committed to the tasks and the overall goal of the team? Why (not)? |
| **8.3** Conflict management: can you tell me about a time when there was a conflict within this team? How did this conflict impact the team? |

**Reflections**

**9. How do you feel about your experience working with that team?**

| **9.1** What did you learn from working with that team? |
| **9.2** How would you evaluate that team in terms of performance? |

**10. Any suggestions?**

| **Is there anything that you would like to add that you think is important for trust in teams?** |
### Appendix B

Observation sheet of the team kick-off workshop

<table>
<thead>
<tr>
<th>Day 1 Workshop activities</th>
<th>Focus for observer</th>
<th>What is being observed</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10:00 Welcome (AK)</strong></td>
<td>1. Physical surroundings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1. Conference room characteristics</td>
<td>Is it spacious enough for all participants to fit in?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is space allocated by the consultant?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is the room color light or rather dark?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>How many doors/windows are there in the room?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>How is the room layout - classroom, board room, U-shaped? Seating arrangement?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What kind of behavior is the setting designed for – open discussion?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2. Objects and resources</td>
<td>How many tables?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>How many chairs?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is there a projector?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Whiteboards? Markers and sticky notes?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are there any company posters or company presentations?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do participants have their name tags on the table?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.3. Atmosphere</td>
<td>Open, relaxed ------closed, tense</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formal ------ informal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Participants</td>
<td>How many participants?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>How many males/females?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical appearance: neat, groomed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dress code: business or casual?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Who is not there but was expected to be there?</td>
<td></td>
</tr>
<tr>
<td><strong>10:15 Who we are, why we are here (All)</strong></td>
<td>3. Interactions</td>
<td>Who decides who speaks and who listens?</td>
<td></td>
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<td></td>
<td>Who is speaking first from the participants?</td>
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<td>Which participants are speaking more?</td>
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<td>Which participants are listening more?</td>
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<tr>
<td>Time</td>
<td>Activity</td>
<td>Questions</td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>10:45</td>
<td>4. Verbal communication</td>
<td>What are they not saying – any sensitive topics?</td>
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<tr>
<td></td>
<td></td>
<td>Posture – closed posture or open posture, showing relaxed state?</td>
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<td></td>
<td></td>
<td>Body movement – Are they shaking their head, nodding?</td>
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<td></td>
<td></td>
<td>Personal space – Do participants stand close together or far apart?</td>
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<td></td>
<td></td>
<td>Eye contact – Do they make eye contact when they talk?</td>
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<td></td>
<td></td>
<td>Facial expressions – When are they smiling, frowning, blinking?</td>
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<tr>
<td>10:45</td>
<td>Project presentation (KR)</td>
<td>4. Verbal communication</td>
<td><strong>What is the Project Manager communicating to the team members?</strong></td>
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<td></td>
<td>Who is the customer/company expectations for this project?</td>
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<td></td>
<td>Is there a successful history of working with this client?</td>
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<td>What are the project objectives as communicated by stakeholders?</td>
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<td>What are the major challenges and risks of this project?</td>
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<td>What is the status?</td>
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<tr>
<td>11:30</td>
<td>Coffee break</td>
<td>3. Interactions</td>
<td>Who is talking to whom?</td>
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<td></td>
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<td></td>
<td>Do they sit in a large group or in smaller groups?</td>
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<tr>
<td>11:45 Roles</td>
<td>(Individual work)</td>
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<td>Are they talking about the project presentation?</td>
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<tr>
<td>12:30 Lunch</td>
<td>break</td>
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<td>Are they working on the exercise?</td>
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<tr>
<td>13:30 Team</td>
<td>exercise (All)</td>
<td>How are the participants assigned to smaller groups?</td>
<td>How are they communicating?</td>
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<td>What information are they sharing? Personal/professional?</td>
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<td>How are they building their reputations and roles within the team?</td>
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<tr>
<td>14:00 Roles</td>
<td>(Discussion)</td>
<td>Who decides who speaks first?</td>
<td>How do they see their role? Part of the team, part of the project?</td>
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<td>Do they clearly define their role and responsibilities?</td>
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<td>What do they focus more on?</td>
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<td>What are the challenges in defining their role?</td>
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<td>What do they require from the other members of the team?</td>
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<td>What is not mentioned?</td>
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<td>What does it mean to be a good member of this team?</td>
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<td>Do sensitive topics come up?</td>
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<td>What are they ready to do to support each other?</td>
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<tr>
<td>Time</td>
<td>Category</td>
<td>Questions</td>
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<tr>
<td>15:00 Coffee break</td>
<td>3. Interactions</td>
<td>Who is talking to whom? Are they talking about the project presentation? Are they discussing their roles? Are they sharing personal information about their life outside of work?</td>
<td></td>
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<tr>
<td>15:15 Project planning presentation (AK)</td>
<td>5. Nonverbal communication</td>
<td>Are they paying attention to the presentation? Body movement – Are they shaking their head, nodding? Posture – closed posture or open posture, showing relaxed state?</td>
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<tr>
<td>15:45 SM Exercises (All)</td>
<td>3. Interactions</td>
<td>Who is talking the most? Does a leader emerge? Who is talking the least? How do they identify and describe their stakeholders? How do they want to involve the stakeholders in the project? What strategies to involve them do they identify?</td>
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<tr>
<td>17:00 Project planning 2 presentation (AK)</td>
<td>5. Nonverbal communication</td>
<td>Are they paying attention to the presentation? Body movement – Are they shaking their head, nodding? Posture – closed posture or open posture, showing relaxed state?</td>
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<tr>
<td>17:30 Wrap-up discussion (All)</td>
<td>4. Verbal communication</td>
<td>What are the rules that they come up with? How will they communicate? Will they meet</td>
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</tbody>
</table>
Do they regularly discuss the project milestones?

Do they develop their own team language? Do they develop new words?

Does the content of the discussions remain strictly at professional level?

**Observer’s Notes**

How am I affecting the process that is being observed?

What am I saying and doing?

What are my thoughts about what is going on?

How do I feel about what is going on?
Appendix C

Sample field note

10:00 a.m. Coffee break negotiated by M. (Sales) who had to make a quick phone call

T. (QM) and K. (HR) also announce that they will have to leave for a short while in the afternoon because they have some conference calls, but they will join afterwards. Everyone is going outside in the lobby to get coffee and snacks. They are sitting in a large circle, a lot of open interaction. V. (IT) and T. (QM) are quickly rushing outside to smoke. They are not participating in the informal coffee break.

10:10 R. (Project Manager)’s Presentation on the project description and objectives

R. is rubbing his hands while he is speaking he is standing while delivering the presentation. He is standing in front of everyone where AK (Team consultant) was previously standing and using the projector to show the presentation. He has already prepared the PowerPoint slides.

During the presentation, R. emphasizes that the project is very important for the company. He frequently uses the expressions “from my point of view”, “my understanding is that”. He describes the client as aggressive on the market and he emphasizes that there is a good market for the product that they have to develop.

He presents the main challenges of the project: volume is huge – a new plant in Ukraine needs to be built. This information triggers a group discussion. They talk about opening Ukraine 2 (a second plant in Ukraine) and K. expresses his knowledge, his HR input on this matter and brings up his concerns about the possibility of not being able to open a Ukraine 2 site due to the lack of human capital/resources/skills in this country. K. says “from previous experience I can say it’s going to be very difficult if not impossible to hire 2500 people in such a short amount of time.”

R. responds “You’re right, it’s definitely a risk”.

K.: “We need a Plan B. We need to talk about this in the Risk Management Analysis. We need 2500 people for the production.”

R. says “It’s a tough timeline but it shouldn’t be a problem. We have the support of our Chinese colleagues”. He also emphasizes the complexity of the project – communication with the client regarding content. The client expects them not to share information with China for fear of leakage and copying of product.

J. intervenes: “But we need our Chinese colleagues because of the benefits they will bring.”

R. takes now the opportunity to present J. as a special function within the project – Synergy Coordinator to China. R. emphasizes “We are very happy to have won this project. The main challenge of this project is commercial. The client expects that our company will do a great job, they are not interested how.” He goes on to present the SGM’s (GM’s legal entity in China) challenge of legal communication. This is a new project for the client as well. R. presents the customer expectation that there will be no data exchange between Europe and China because they fear leakage of development and innovation data. R. says: “This is going to be a big challenge for us. We need to find a way to work with this.”

J. shares sensitive information about a previous project he worked on: “We might have a solution.” Team members now intervene and talk freely about this, ask questions to clarify.
R. says: “Indeed, data exchange and protection will be a challenge. We need to always talk to the client about what we can share and what not. Please always check. This is a risk. We need to always have it on our mind.” Team members continue to share from their experience on previous projects, how they did it in the past. It becomes a discussion point. R. says: “Ok, we have to discuss.” S. agrees: “This is a very important aspect in order for us to be successful.”

R. moves on to present the team and the team core members and expresses the need for regular core team meetings. He presents how he divided the team into 3 subprojects and 3 subproject team managers and a special function of Synergy Coordinator with China. He discusses the escalation procedure – how to communicate, whom to contact. He presents the main internal stakeholders: the Project Owner, Steering Committee and the Executive Steering Committee. R. says: “This is for you to this in mind, not to get lost.” R. presents the Project Management Process according to company standards: Project initiation -> Project planning -> Project control -> Project closure

R. clearly states: “We are now here at project planning. This is where we are and this is the next 3 years until project closure.” He goes on to present the main assumptions and objectives: “We need to be successful both on the operational and the commercial side.” He shows everyone the commercial offer that won the tender of GM, “As you can see this is a really big challenge.” The numbers are really competitive, saving 10 euro/car, maximizing energy-cost, efficiency in ramp costs and CapEX. “On the other hand, design is up to us. We have freedom. This can support our colleagues from Purchasing and Manufacturing to achieve the client requests.”
Appendix D

Informed Consent Form

Principal Investigator (PI)’s Declaration:

I have explained and defined in detail the research procedures in which the subject (or legal representative) has consented to participate.
I, as the PI also declare that the research team of this study (including PI), are the only people who have access to the research data collected of the participants and will ensure their confidentiality and privacy, even after the study is completed (storage duration according to institution’s research data management practice/policy if available, otherwise a storage duration of minimum 3 years is required).
This study looks at trust development in cross-functional teams. Specifically, as part of my PhD Thesis, I am interested in your experience of working with cross-functional teams and trust development. This is very interesting for addressing future conflict management training and team building programs.
I, as the PI would like to ask for your permission to audio tape the session/write field notes about this meeting because I don’t want to miss any of your comments. All information will be kept confidential. This means that your responses will only be shared with research team members and that the data will be undisclosed and reported only in an aggregate form – no individual response will be reported. The informed consent forms will be stored in a lock-secured cabinet.
There is no more than minimum risk foreseen in the study.

________________________________________          ______________________
PI’s Name and Signature:                                      Date:

Participant’s Declaration:

I understand that participation is voluntary. Refusal to participate will involve no penalty. I may discontinue participation at any time. I declare that I am at least 18 years of age. I have read and fully understood the contents of this form, and hereby give consent to the researcher to collect, use and disclose and/or process my personal data for the purpose(s) described in this form.

________________________________________          ______________________
Participant’s Signature:                                      Date:
Appendix E
Coding instructions

Instructions:
Read through the definitions of the category and subcategories and familiarize yourself with the descriptions and examples for each. You will then be presented with 3 units of coding in the form of 3 full transcript interviews with highlighted passages referring specifically to these codes.

When you code you might not always be completely sure of which code to ascribe. If you are unsure, consult the coding scheme again. If you are still not certain, indicate what made you unsure (e.g. underline the part that confused you). Please also write down which code you would choose if you had to guess.

Communication-oriented trust-building practices

Definition: Main category used to capture the trust-building practices that refer specifically to communication. This category includes 11 subcategories: being receptive towards the team, encouraging communication, sharing relevant information and knowledge, providing timely feedback, creating common knowledge, creating a shared vision, offering explanations for decisions, creating an open communication environment, checking for common understanding of requirements, communicating expectations and displaying positive body language.

C1: Being receptive towards the team

Definition: Subcategory used to describe behaviors referring to being receptive towards the team meaning communicating concern about the well-being of the team members and being able to identify with the team and the team members.
Example: “Because like, as I really worked with several types of people really from assistants up to CEOs and COOs, of course each time you have to think 'Ok, who am I talking to? How is the person taking in information?’” (IVIW12)

Coding rules: Code only if the it refers to verbal communication if non-verbal display of concern and empathy code C11.

C2: Encouraging communication

Definition: Subcategory encompassing behaviors of encouraging communication, namely communicating and following a regular meeting schedule and letting team members talk first.

Example: “We would definitely have regular meetings at least once a week, to kind of talk about the objectives and goals of the week”(DZIW6)

Coding rules: Code only if referring to modes of encouraging communication. If referring to communicating sensitive issues, showing vulnerability and voicing concern code C8.

C3: Sharing relevant information and knowledge

Definition: Subcategory that refers to communicating important information for the project and the team, sharing the experience and knowledge from other past projects and discerning between relevant and irrelevant information.

Example: “So they will be able to share more ideas and if you share more ideas and you trust the ideas of other team members you'll be able to make a better performance.” (DRIW4)

Coding rules: Usually present in combination with the keywords “sharing”; “proactive”; “information”; “knowledge” and “innovation”.

C4: Providing timely feedback

Definition: Subcategory that refers to giving and receiving feedback in a proper and timely manner from team members.

Example: “You have to be able to give proper feedback... Like if you have, you know, these team talks you need to give feedback about their progress and about the things that they can
improve and you don't have to hide critics but you have to communicate things in a very adequate way in respect to the person. And you can talk about the issue but in a very valued manner to the person and this is a kind of trust building.” (DRIW4)

**Coding rules:** Specifically referring to how feedback is offered within the team either by management or other team members (e.g. respectful, timely, openly, honestly). If the feedback refers to building shared responsibility then code C5.

**C5: Creating common knowledge**

**Definition:** Subcategory refering to behaviors of sharing responsibility and empowering the team to develop knowledge.

**Example:** “(...) and to make it clear that this project will be a successful project and we will all take the responsibility. That this responsibility is not only for the leader, that it's in the hands of all of us.”(DRIW4)

**Coding rules:** When describing shared purpose and common goals code C6. As opposed to C3 which refers more to sharing knowledge, C5 is more about creating team knowledge.

**C6: Creating a shared vision**

**Definition:** Subcategory used to capture behaviors of building and communicating common team interests and creating a sense of shared purpose within the team.

**Example:** “Like you have to have the trust from the team and you need to trust into the team. That's where it all starts and ends, otherwise it won't work out.” (IVIW12)

**Coding rules:** Only code when describing team interests and sense of shared purpose, when referring to shared responsibility and common knowledge then code C5.

**C7: Offering explanations for decisions**

**Definition:** Subcategory used to describe transparently and timely communicating an explanation for the decisions being made within the team.
**Example:** “The idea is that you have an adjudication that goes between the different heads of different departments and concerns. You say "Look, you have to be reasonable: this is what this person needs, this is what that person needs." (MNIW9)

**Coding rules:** Only code if describing reasons for decisions. If communicating feedback then code C4.

**C8: Creating an open communication environment**

**Definition:** Subcategory that refers to being able to communicate sensitive and confidential information within the team, fostering self-disclosure and authenticity and encouraging team members to speak up and voice their concerns.

**Example:** “But I think that as long as the communication is good and people talk to each other, even if there are arguments and it happened to us as well. But again if you are able to have a good communication and have the same opening from the leadership I think it has to work well together.” (RKIW11)

**Coding rules:** If referring to modes of encouraging communication then code C2.

**C9: Checking for common understanding of requirements**

**Definition:** Subcategory that refers to asking questions about the understanding of the project requirements and double checking that the whole team has the same understanding about what they have to do and how they have to do it.

**Example:** “At the end of the discussion I always like to end with: ‘Ok, are we aligned on what we are trying to do, are we aligned on what I need from you and are we aligned on when we need to have this done.’ Those 3 key things are... seem quite simple, kind of like that's obvious but you'd be amazed of how many times people walk out of a meeting even at C-level and they forget to do a check and send a check on that, where they don't align on that and it just causes problems as well as catastrophes.” (DZIV6)
**Coding rules:** Only code C9 if the participants use “check”; “alignment”; “making sure they understand”; “control if”. For asking questions and speaking up always code C8.

**C10: Communicating expectations**

**Definition:** Subcategory that describes the way in which project and performance expectations are being clearly and timely communicated within the team (e.g. openly, transparently communicating expectations).

**Example:** “I defined what they needed to do and I put the expectations very clearly, I was very optimistic that you know, that it’s going to happen from the 1st month but it didn’t.” (RKIW11)

**Coding rules:** Only referring to the communication of expectations, when checking for the understanding of these expectations then code C9.

**C11: Displaying positive body language**

**Definition:** Subcategory that refers to sending positive non-verbal signals towards the team members.

**Example:** “Well if they all get to Orchard Road smiling, then there is trust in the team.” (MNIW9)

“Yes, so body language is huge: eye-contact, even how people sit at a meeting or sit at one end, people that either lean back or cross their arms. To me that implies that they are either very skeptical of what they are saying or what you are trying to do.” (DZIW6)

**Coding rules:** All aspects of the definition including non-verbal signaling behavior, in case verbal communication then code C1.